

COUNTRY GUIDE

THE FARM MAGAZINE

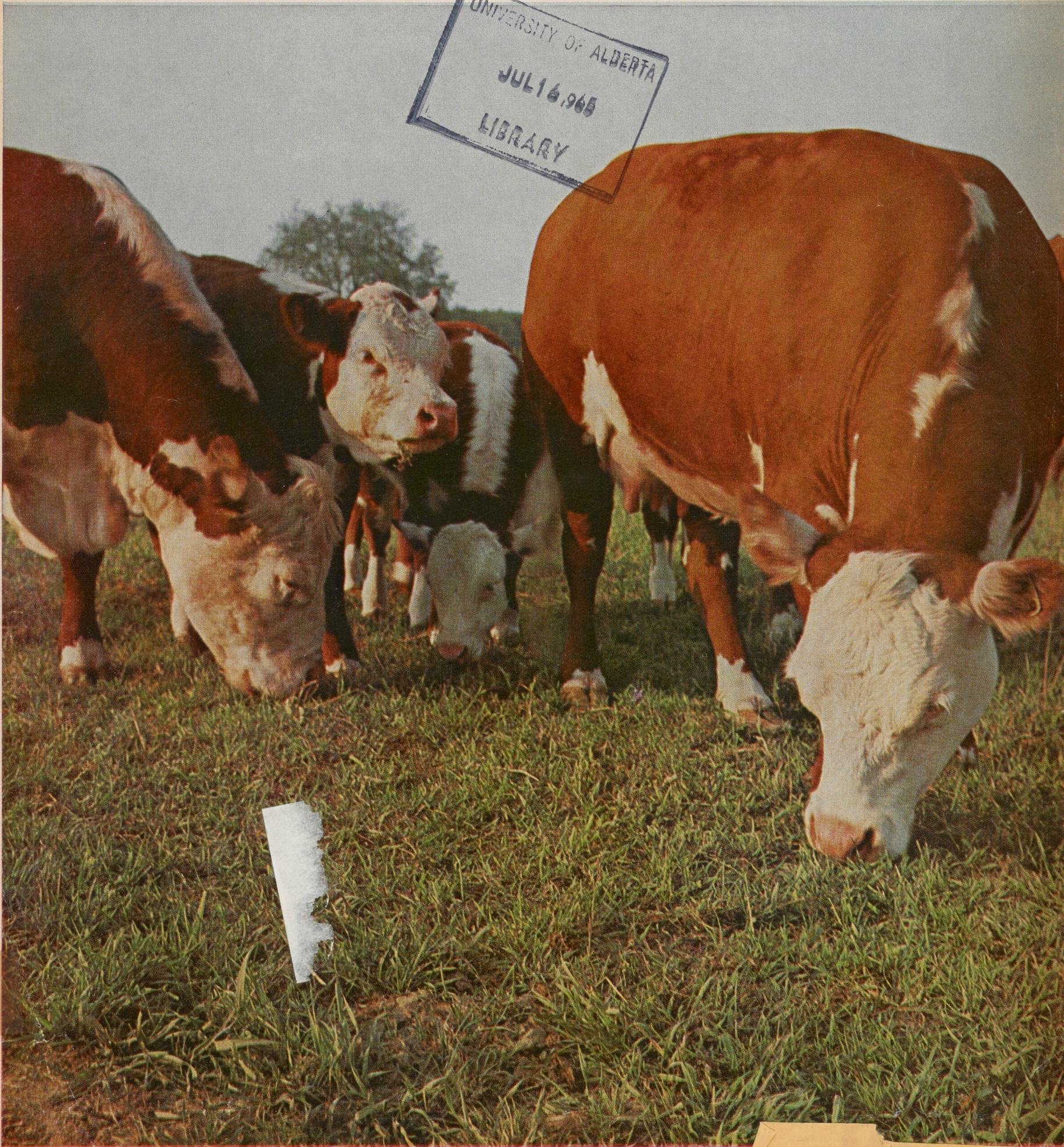
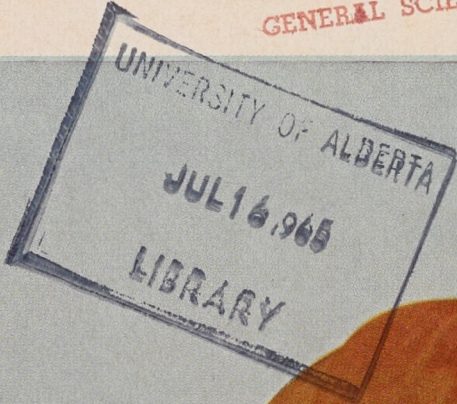
Invest Your Credit

Tips on Combine Care

Grow Grain, Feed Hogs

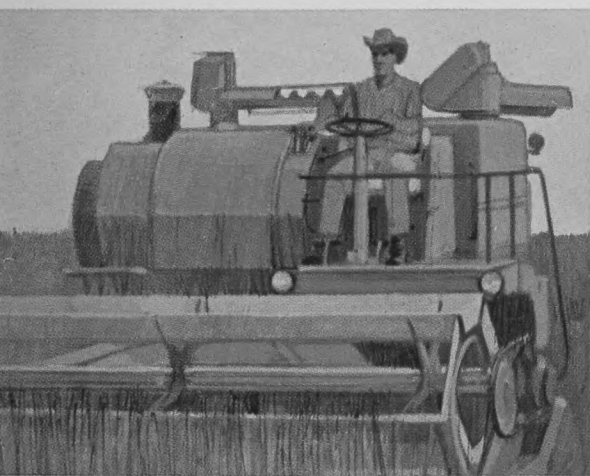
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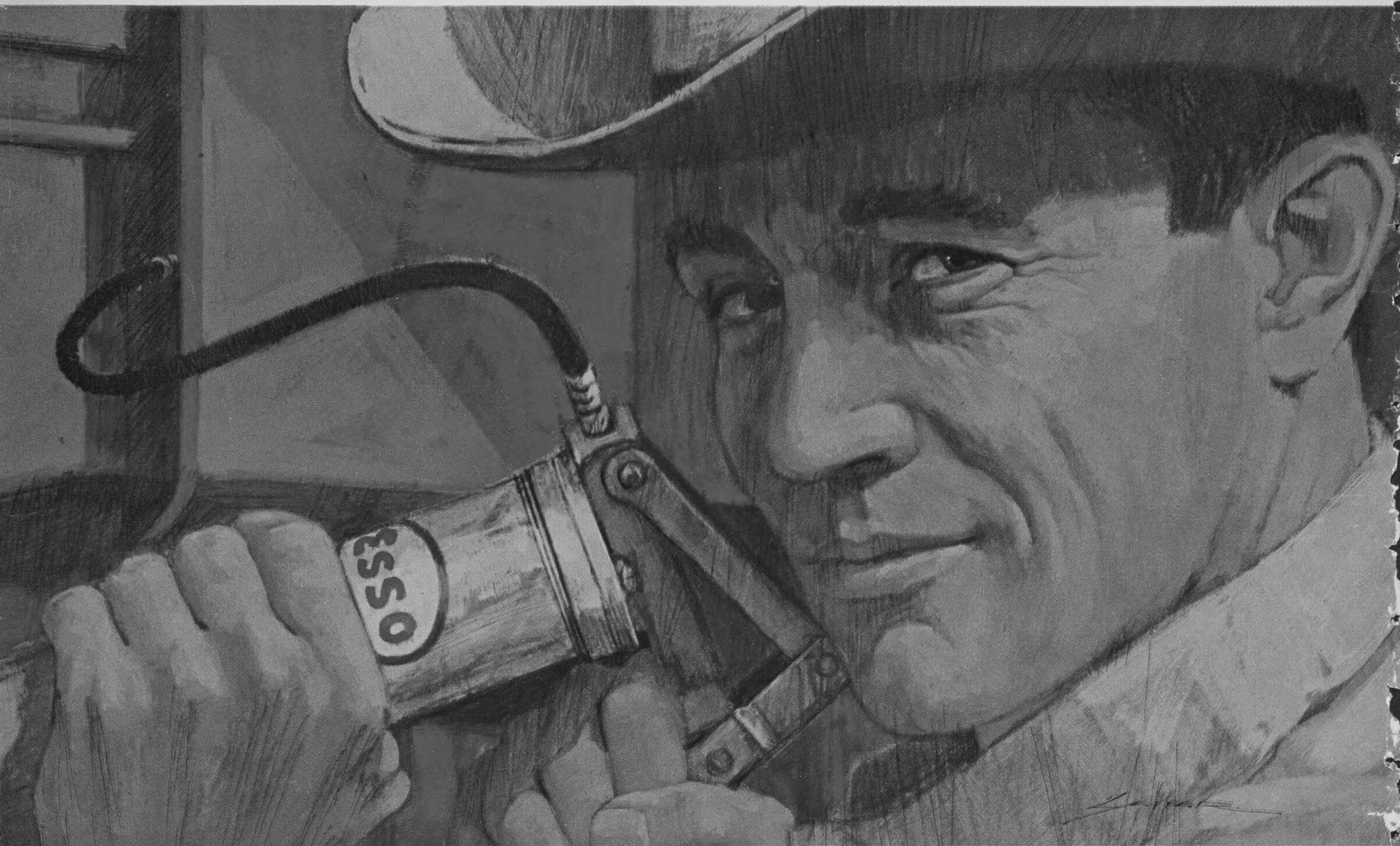


JULY 1965 — 25¢

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COUNTRY GUIDE

THE FARM MAGAZINE

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JULY 1965

In July, grain farmers are getting their combines ready for the dawn-to-dusk harvest of the crop which is soon to come. Cliff Faulkner explains how to check your combine now to save yourself grief at harvest time, while Edwin Docking of the University of Saskatchewan details how you can best adjust your combine in the field. You might want to clip this latter page and keep it with you on the combine.

With poultrymen and hogmen now committed to confinement rearing and housing for their flocks and herds, why not handle sheep the same way? L. T. Jones of the Fairview Agricultural and Vocational School in Alberta describes the successful program he has developed.

When it comes to business management, there has been a change in the old-time philosophy of "neither a borrower nor a lender be." Roger Fry tells how three farmers have learned to invest their credit, and he couples that story with some useful ideas from Dr. Clay Gilson of the University of Manitoba.

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About Our Cover

Those contented Herefords belong to our Eastern Field Editor, Peter Lewington. To demonstrate once again the versatility of our editorial staff, Peter also took the picture.

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Subscription rates in Canada—\$1.00 one year, \$1.50 two years, \$2.00 three years, \$3.00 five years. Outside Canada—\$1.50 per year. Single copies 25¢. Authorized as second class mail by the Post Office Department, Ottawa, and for payment of postage in cash. Postmasters return Forms 29B and 67B to 1760 Ellice Avenue, Winnipeg 21, Manitoba.

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Guy Weeks shown on a working Colorado Ranch.

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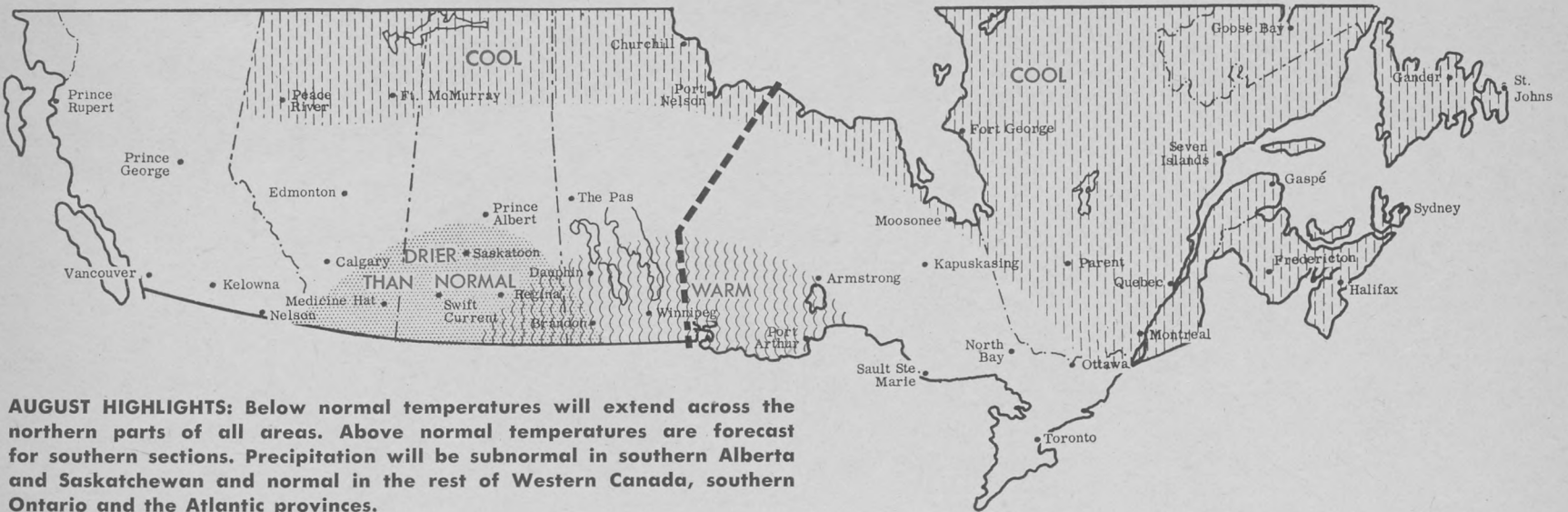
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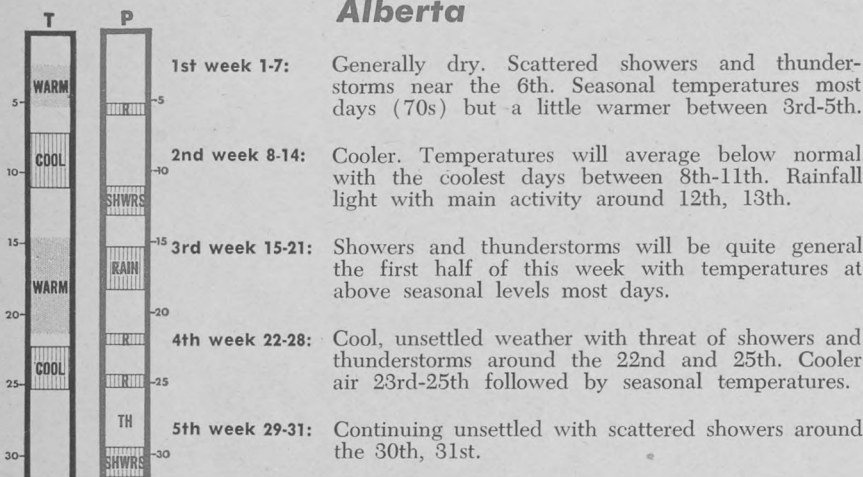
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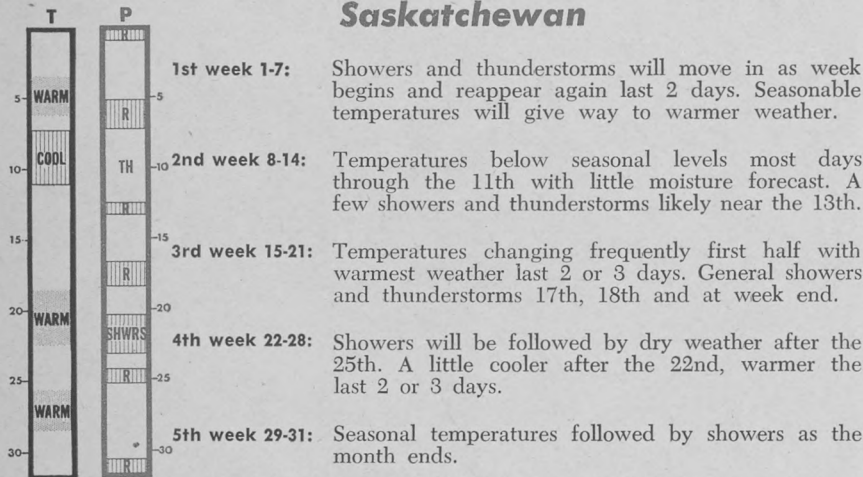
AUGUST 1965

(Allow a day or two either way in using this forecast. It should be 75 per cent right for your area, but not necessarily for your farm.—Ed.)

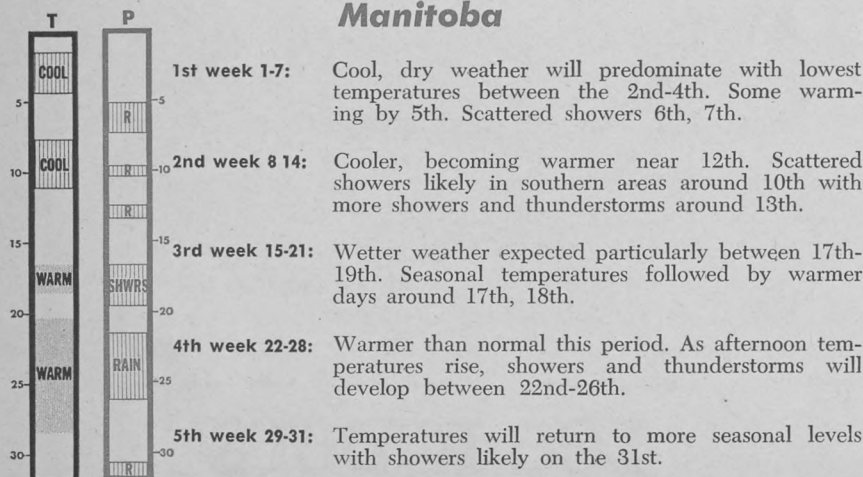
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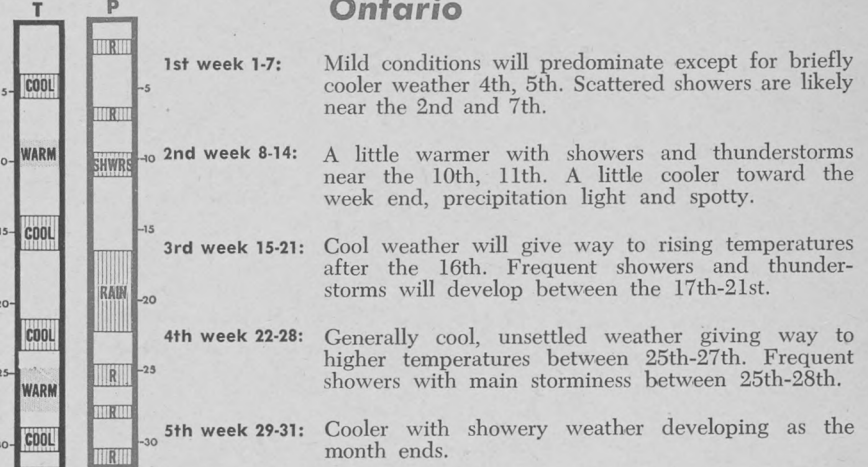
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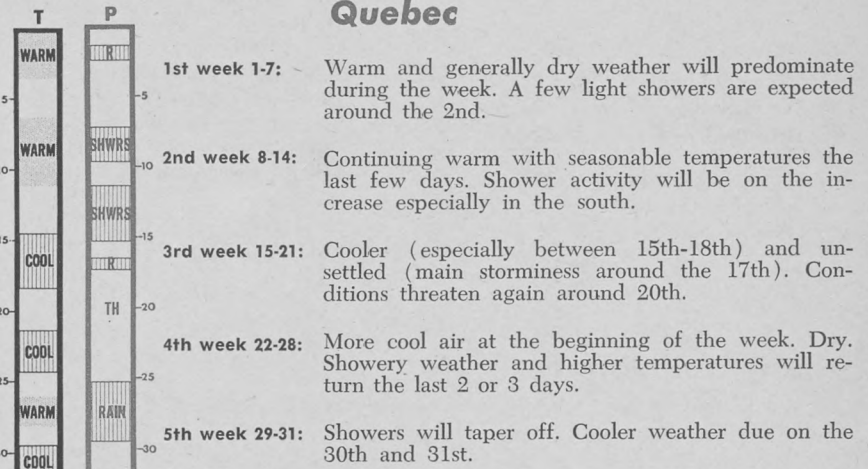
Manitoba



Ontario



Quebec



Atlantic Provinces



Key to Abbreviations: T, temperature; P, precipitation; CL, cooler; WM, warmer; TH, threatening; SH, showers; R-S, rain or snow.

The Real Problem Is Pollution

No matter how water demands grow, the volume of water remains unchanged. We must make better use of it

BOTH WATER and talk have long been considered cheap commodities. Currently there is a lot of talk about a crisis in water. This talk will have to be followed by more action and we will have to revise our concepts of cheap water.

No farmer needs to be reminded of his complete dependence upon water; it is the one essential of all forms of life. For some of us the water shortage is an academic problem over the horizon; for others the amount of available moisture is a perennial consideration. For farmers on the fringe of growing cities, a dry well is an alarming new development.

From the welter of talk about water two viewpoints stand out. The one school argues for water diversion on a breathtaking scale; it is apparently technically feasible to divert the water of the Hudson Bay watershed southward to Lake Huron while the waters of the Yukon and northern British Columbia could be diverted to the U.S. southwest and across the Prairies to Lake Superior.

The second school of thought demands better use of the water we already have; what we have to overcome, it is argued, is not so much a shortage of water as the waste of what we have.

The much publicized and cyclical low level of the Great Lakes has honed a fine edge on the projection of water use. The projected demands, which are of astronomical size, have to be considered in the light of the all-too-obvious fact that at no time in the future will the world supply of water be greater by so much as one drop. If there is to be enough water it will have to be used, not once, but many times in its journey to the sea.

What we really mean, says Dr. Don Huntley, director of Ontario's Agricultural Research Institute, when we talk of water shortage, is that "water is not available for all selfish demands in the right place at the right time in the right quantity and of the desired purity at next to no cost. No one has yet given a good reason why water must be cheap."

Pollution control, which permits the re-use of water is going to become more and more expensive. The Ontario Water Resources Commission has made some excellent progress in cleaning up rivers and streams which had become mere open sewers. However, in setting up minimum standards for wastes it is differing from the very successful concept employed in Germany's Ruhr Valley where water treatment costs assessed against industry discharging wastes are in direct relationship to the quality of the water. This provides incentives not just for minimum acceptable standards but for water purity. Indicative of what can be achieved are the trout thriv-

ing in the water which is discharged from one Canadian oil refinery.

The Ontario Institute of Professional Agrologists, which met in Toronto this spring, was urged to press for a federal ministry of water. While this is a reasonable proposition it is an unlikely prospect in view of the provisions of the British North America Act which vest control with the provinces. Comments Dr. E. G. Pleva of Western

University, "In the past year, according to my files, over 30 United States and Canadian political leaders have made public statements of the deteriorating conditions of water resources in the Great Lakes region. Yet the first step is certainly their responsibility. Perhaps they should convene to an island in Lake Erie and not return to the mainland until a proper basis of co-operation is agreed upon."—P.L. V

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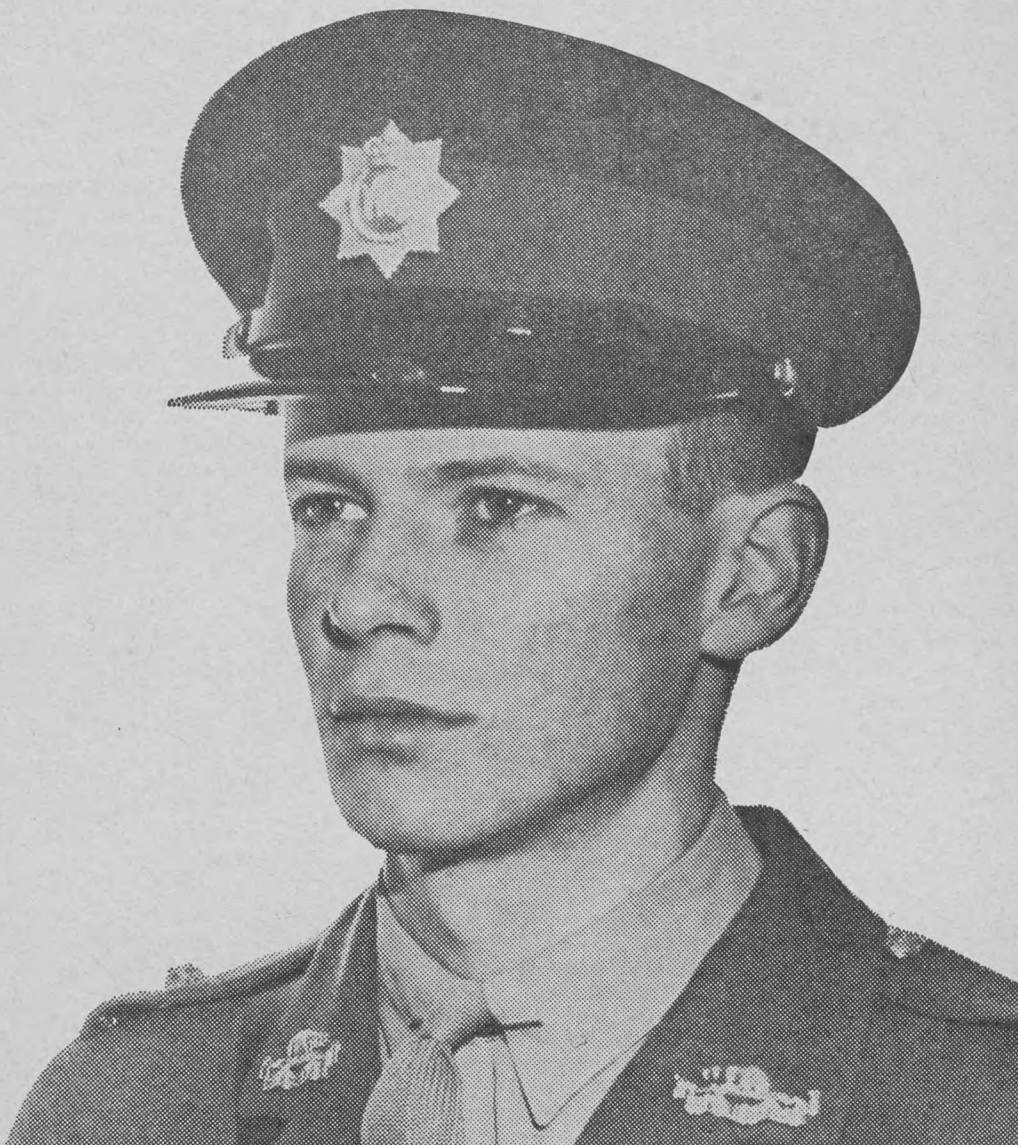
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July 7, 1965. Secretary.
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Editorials

Alberta's New Marketing Act

PLANNED AND orderly marketing of farm products has been given a powerful boost with the passing of a new Marketing Act in Alberta. Although distrust of organized marketing programs has run deep in this key agricultural province for many years, the attitude may now be changing.

The new legislation doesn't by any means go as far as some farm organizations would like. It still requires an affirmative vote by over half of all registered producers before a marketing board can be set up. But the important fact is that Alberta now is going to take a serious look at boards and commissions. Advocates of such marketing programs will have a chance to present their cases carefully and logically.

This development could hardly come at a better time. Orderly marketing is being tried with increasing success in other provinces. Ontario now has 35 products being marketed through its marketing acts. Seventy-five per cent of all producers are organized under marketing plans there and over 60 per cent of the total agricultural production is sold through them. The only major commodities not covered there are beef, some vegetables and grains.

Manitoba now has commissions selling its hogs and potatoes. With Alberta beginning to look seriously at marketing, the day comes

closer when some co-ordination of marketing plans across the country can begin.

The fact that the Alberta Government is seriously concerned about marketing can be seen in the way it went about devising the legislation.

With the old legislation being criticized by farm and processor groups, Agriculture Minister Hon. H. E. Strom last year appointed a Marketing Act Study Committee which included officials of the Department of Agriculture. Committee members traveled to B.C. to study the broiler and vegetable marketing programs there, to Ontario to see its myriad plans, and to Manitoba to enquire about the then-proposed hog marketing commission. They traveled to Idaho and Washington to see livestock and vegetable commissions which do an advertising and promotion job.

Alberta's new Act is based on what the Government there calls the most attractive features of what the Study Committee saw.

It provides for an Agricultural Products Marketing Council to advise Government on marketing plans. One of the Government's most prominent officials, Dairy Commissioner D. A. McCallum has been named its chairman. A full-time secretary has also been named. The Council has five members representing producers, industry and government, who will

move through the province in the months ahead, holding hearings and gauging the pulse of farm people in this matter.

Under the Act, there can be producer marketing boards and marketing commissions as well as industry advisory committees to advise the Marketing Council on any commodity marketed through a producer marketing board.

A producer board, once established, could negotiate minimum producer prices including terms and conditions of sale and operate as a selling agency. It could not restrict production of a commodity.

Commissions would act to stimulate, increase and improve the marketing of agricultural products by establishing quality standards, and by advertising, education, research or other means. Funds would be obtained by a fee or levy upon the product sold or by license or other means. Commissions could set the time and place of selling, could have handling facilities and could collect funds through a levy. They could be established without a vote, if there is no strong opposition.

The new Marketing Council sees a busy summer season ahead. Two plans had already been submitted before it went into operation—one for a broiler marketing board, and another for a swine commission.

If the great discussion on marketing which is getting under way in Alberta results in programs being set up, it will mean that orderly marketing plans are catching on in all agricultural regions of this country. The plans could provide Canada's farmers with assurances of better markets as they move toward increased farm output. V

Agriculture at Expo '67

THE PROBLEM of the world today is not automobiles, not electronic computers, not the race to the moon. The problem is food!

But at the World's Fair in Montreal in 1967, where the theme is appropriately Man and His World, there is an increasing danger that visitors will see the products of our factories and laboratories but hardly a glimpse of the great achievement that made them possible—the incredible success of farm people in producing food.

At the Fair, visitors will see the works of our artists and engineers and businessmen. They will see such wonders as instant communication around the world and the increasing luxury that is becoming commonplace with us. But the most significant, if not the most spectacular development of this age, is our ability to feed the people. This story should be told. Farmers have shown the way to a world of plenty—and the lesson they have taught could be the key to peace.

Their story must be told at Expo '67 to press home the point that there can be a solution to the world's food problem. It must be told because farmers have an immediate and vital need to expand their markets.

Yet in recent days, word has come from Expo headquarters that the agricultural pavilion may be dropped. Commercial interests, so the story goes, have not come forth to support it.

Yet one could ask, Has Expo begun to sell the idea of an agricultural pavilion? Has government, which is prepared to commit \$10 million of the taxpayers' money for a television center there, thrown its full support behind it? Has Expo tried to convince industry and government and farm organizations of the opportunity it is providing, and the job to be done? Expo artists have drawn elaborate plans for an agricultural pavilion, but Expo salesmen have not been traveling the country drumming

home the story of Expo to those who can support the agricultural pavilion. Instead, the word from the agricultural arm of Expo's administrative staff is one of personality conflicts and lack of a clear purpose.

The peaceful and beneficent agricultural revolution is not over—it may be only beginning. Farmers, through their accomplishment, have made it possible for Canada to move on to industrial development and wealth such as would hardly have been imagined a generation ago.

Canadian farmers are helping to feed China and Russia and many other underfed coun-

tries. In doing so, they are opening up lines of communication which are essential if peace is to be preserved.

In the interests of peace, and in the narrower interests of farmers themselves, it would be shortsighted for this country to have a World's Fair dealing with Man and His World and to omit from that Fair an appropriate agricultural exhibit.

Expo officials have paid lip service to agriculture, have talked in glowing terms of the agricultural pavilion that will be there, have even produced lavish pictures of the proposed exhibit. But with less than 2 years to go, there is little evidence that they have gone out into the market place to sell their ideas to the commercial firms and organizations or to the Government which must support it. V

Industry for Rural Areas

THE ABSENCE of intelligent urban-rural planning can be seen across this country. Our larger cities are literally throttling themselves with traffic. The price of getting people in and out of Montreal by the time Expo '67 opens its doors will be astronomical. In the vicinity of Toronto, the MacDonald-Cartier Freeway (which began as a major traffic artery to carry people across Ontario) has degenerated into a bottleneck of local traffic and is being widened to 16 lanes. Now, the Ontario Government plans to pour money into a subsidized commuter rail line.

In contrast to the uninhibited growth of our largest cities is the underdevelopment and underemployment in portions of every province. However, the Federal Government, in concert with the provinces, now plans some far-reaching remedial measures.

The measures, which will be effected through extensions to the Department of Industry Act, will be a part of the Government's campaign

against poverty and inadequate opportunities. They will offer industry further inducements to settle in areas where there is promise that the local economy can be stimulated.

Specifically, the Government proposes new grants to industry and development of new training methods for effective use of labor. It also proposes to make these incentives available in new areas.

As Mr. Pearson stated in the House of Commons, "The new program of industrial assistance would be available in almost all of the Atlantic provinces, in substantial areas of Manitoba and Saskatchewan and in considerable areas of Quebec. In the three richest provinces—Ontario, British Columbia and Alberta—some smaller areas would qualify."

Similar measures have been applied with great success in other countries that are less well endowed than Canada. If the fine details of the Government proposals are skillfully drawn up and boldly executed and if there is full provincial co-operation, the program will be a valuable one. Farm communities would benefit through the employment opportunities and the increased markets for food products that would open up. V

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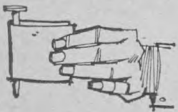


Let's chat
with
John Blakely

about nailing into concrete or masonry

In spite of what some people may tell you, three quarters of an inch penetration into concrete will normally give you good solid fastening. That is if you use a concrete nail of spiral design. If you use longer nails than are necessary you increase the possibility of concrete or nail fracture.

When you use concrete nails of shorter length your fingers are in greater danger. It will be time well spent to insert the nail into a strip of folded paper or cardboard and hold in position for driving as shown in the diagram.



Another tip that will give you stronger construction — always drive concrete nails at right angles to the strapping and concrete with solid well directed blows. The result again will be less possibility of concrete and nail fracture.

Due to the hard quality of the materials involved, there is always the hazard of flying chips when you're driving nails into concrete or masonry. Safety goggles should therefore be worn as a precaution against possible eye and face injury.

As far as the nails themselves are concerned, "Ardox" spiral concrete nails are made from special steel for exceptional strength. They're heat treated for extra toughness and rigidity. The spiral shank gives you the high degree of holding power you've come to expect from any "Ardox" spiral nail.



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News Highlights

Canadians are now eating $1\frac{1}{2}$ times as much beef as pork, whereas in the early '50s they ate more pork than beef. Veal and lamb consumption is declining while that of canned meat goes up. Per capita consumption of beef was 78.7 lb. last year compared to 51.9 lb. for pork and 34.5 for poultry.

New records in livestock and poultry marketings and in Canada's per capita consumption of meats in 1964 resulted in the most favorable year for its packinghouse operations since 1960, according to the annual report of Canada Packers Ltd.

The one development in food consumption which predominates over all others is the shift toward the greater use of livestock products. During the past 50 years, according to a spokesman of the Jewel Tea Company, the total amount of food consumed per capita has dropped by more than 100 lb. However, consumption has shifted from 36 to 44 per cent animal products.

The Regina milk shed in Saskatchewan is the latest fluid milk marketing area to convert to stainless steel bulk tanks.

A special committee to study possible legislation providing for the incorporation of co-operatives and governing their powers and obligations has been set up by the Federal Government.

The cattle industry must begin to build up its herds if it is to maintain U.S. per capita consumption of beef at the record level of 100 lb. a year, Dr. H. DeGraff, president of the American Meat Institute, said recently. He said consumers are now eating beef at a rate that cannot be maintained from the present beef producing base in the United States.

Australia is suffering one of the worst droughts in living memory. In some waterless areas, cows are selling for \$2 and sheep for 30 cents.

Prof. W. J. Rae retires as head of the Department of Poultry Science at the University of Saskatchewan. He is succeeded by Prof. J. B. O'Neil.

Doug Logsdail, formerly with the Kemptville Agricultural School, has been appointed technical director of the Plant Food Council of Ontario. Purpose of the organization, which is supported by fertilizer manufacturers, is to improve manufacture, distribution and intelligent use of plant food.

Manure lagoons, auto graveyards, badly located garbage dumps and derelict buildings should be cleaned up and greater action taken toward highway littering, water and air pollution and fire prevention in a giant program to clean and polish up Canada for its centennial celebration in 1967. These suggestions were made at a 2-day seminar on community improvement and rural beautifi-

cation sponsored by the Centennial Commission.

Newly appointed economist with the Canadian Federation of Agriculture is Peter Marten. He succeeds Dr. Armand Lacasse who resigned to become economist with the Quebec Marketing Board. Mr. Marten is multi-lingual, speaking English, French and German as well as his native language which is Dutch.

Because of the growing interest in herd health programs, Manitoba's veterinarians have taken a 2-day refresher course in livestock nutrition at the University of Manitoba.

The index of physical volume of agricultural production for Canada in 1964 was 7 per cent below the 1963 level but was still the second highest on record.

Backyard-growers are going to be ruled out of world field crop competitions at the Royal Agricultural Winter Fair. Rules are being amended to limit competitions to

in Britain. This is made possible by a commercially made traction control bar which enables several tractors to be operated in conjunction with one driven tractor. The bar is a telescopic bar freely linked to the implement of the driven tractor and the front axle of the driverless tractor. It incorporates two hydraulic pistons and automatically engages the clutch, opens the throttle and steers the driverless tractors.

Saskatchewan's Family Farm Improvement Branch plans displays of machines, equipment and materials for modernizing the farmstead to be held in Regina and Saskatoon next November following the Farm Progress Days being held in Winnipeg. At the events which are being called farmstead "mexabitions" there will be short lectures on systems for handling hay, silage, grain, water sewage, manure, chemicals and fuels.

Farmers' cash receipts from farming operations continue to bound



Lieutenant-Governor Paul Comtois of Quebec welcomes Guide editor Elva Fletcher (l.) and retiring CWPC president Simone Daigneault to Government House

[L'Action photo]

Country Guide home editor Elva Fletcher was elected president of the Canadian Women's Press Club at the Club's triennial meeting in Montreal last month. On the post-convention tour that followed, she traveled some 1,000 miles, most of it by air, into the heart of the newly industrialized Quebec. On her itinerary were Quebec City, the mushrooming coastal community of Sept Iles, the construction sites of two dams in the huge Manicouagan power project that is being carved out of the Quebec interior, and Arvida, the aluminum city, which is considered one of Canada's best-planned company towns.

recognize growers of such crops as wheat, oats, barley, rye, ear corns and soybeans. Total prize offering for cattle at the fair will be increased by about \$25,000 contributed by the Federal Government.

Farmers are becoming concerned about the slow-down of grain movement from country elevators to the West Coast as a result of the dragged-out negotiations taking place between elevator companies and the grain terminal workers, says Alf Gleave, a director of the National Farmers' Union. He said there is an air of apprehension among farmers that the strike may spread and become prolonged.

Disc harrowing with three tractors and three sets of discs controlled by one man was demonstrated recently

ahead. They are estimated at \$974.1 million for the first 3 months of 1965, 14 per cent above the record figure of \$854.9 million established for the corresponding period of 1964. A rise in Wheat Board payments to \$292.1 million from \$208.5 million for the first quarter of 1964 accounted for much of the gain. The most significant gains occurred in Ontario, where tobacco and cattle receipts were up, and Saskatchewan and Alberta.

The Ontario legislature has given approval to the details of the Milk Act which will provide the operating blueprint of the province's dairy industry when it comes into force. A last minute amendment to the Act gave power to the Milk Commission to classify all milk into one of three

grades — Grade A milk, industrial milk, and reconstituted milk. The new Ontario Milk Commission, which will supervise all segments of the dairy industry, will likely be established soon.

Site of the 1965 International Plowing Match and farm machinery demonstration scheduled for October 13 to 16 will be Massey-Ferguson farm at Milliken in York County, Ont.

The number of farms grossing \$10,000 or more annually in the United States is increasing rapidly. According to a report of the United States Department of Agriculture, the number of these farms increased from 320,000 in 1939 to 828,000 in 1959, hit an estimated 977,000 by 1963 and is expected to reach about 1.1 million by 1970. Farms grossing \$40,000 or more annually increased from 29,000 in 1939 to 106,000 in 1959. The big decrease came in farms grossing \$2,500 or less a year. They accounted for 95 per cent of the decreases.

A new low-fat high-protein cheese for weight-watchers has been developed by the United States Department of Agriculture.

The 41 members of the Sturgeon-Strathcona Farm Business Management Association in Alberta had an average capital investment in 1964 of \$113,899 and an average revenue of \$18,445. Net income averaged \$6,326.

A National Wildlife Program for Canada comprising three major undertakings has been proposed by Hon. Arthur Laing, Minister of Northern Affairs and National Resources. The program would include a Canada Wildlife Act to provide for wildlife research areas and laboratories, agreements between federal and provincial governments or other organizations, and for the appropriation of money by Parliament. The second undertaking would be a migratory bird program to preserve waterfowl habitat and intensify waterfowl research. The third phase would call for general wildlife research involving federal support to deal with such things as training wildlife biologists, and studying diseases and parasites and the effects of pesticides on wildlife.

"It's time to stop calling success failure and it's time for farmers to act like the important people they are," says W. C. Cameron, director-general of Canada Department of Agriculture's Production and Marketing Branch. He says that today one farm worker produces food for 32 persons. About 10 per cent of Canada's 6.3 million workers were employed on farms in 1963. Agriculture employs three times as many persons as all other primary industries combined.

The capacity to produce fertilizer on the Prairies continues to increase.

Sherritt Gordon Mines Limited will soon be producing ammonium phosphate from the new \$23 million expansion of its plant at Fort Saskatchewan, Alta. This firm also produces feeding grade urea. Plans have also been announced for a \$30 million chemical fertilizer plant to be built at Brandon, Man., by J. R. Simplot Company of Boise, Idaho.

A world food shortage crisis may be approaching. The Canadian Federation of Agriculture refers to views of the Swedish economist, Dr. Gunnar Myrdal, who has concluded that in 10 years or less the world will be faced with mass starvation that only food aid can possibly avert. In his view, one that is also shared by the CFA, the increase in food aid that will be required should be distributed internationally through the World Food Program with the cost being shared by all developed countries.

CALLS FOR EXPANDING AGRICULTURE

The Canadian Federation of Agriculture is greatly encouraged by the basic approach taken by the Government in the April throne speech both in respect to matters of farm policy and of social and economic reform. In a special submission to the Agriculture Committee of the Federal Cabinet, it also called for action on the following policy proposals:

- A national sugar policy to ensure fair returns and fair shares of the market to both the domestic producer and the foreign supplier in developing countries.
- Emergency or disaster credit legislation which would provide interest-free loans to farmers who have suffered severe losses through natural disasters such as flood or frost.
- Legislation to compensate farmers for losses sustained through no fault of their own as a result of condemnation of their livestock and livestock products because of pesticide residues.

In calling for policies to provide greater stability and higher returns to farmers, the CFA asked for a combination of measures to obtain: (1) Reasonable price protection to the producer. (2) Steady improvement and efficiency and productivity by means adapted not only to large farming operations but to those of the moderate size. (3) Steady improvement in manpower and training policies. (4) Adequate rural development policies to provide greater opportunities in rural areas. V

LOWER GRAZING FEES FOR CALVES

Livestock men will pay \$1 less per head for suckling calves on PFRA community pastures this year.

The fees for calves born prior to August 1 of the current year has been reduced to \$3 per head, according to Mr. M. J. Fitzgerald, PFRA director. V

When these farm accidents occurred U.G.G. paid up fully . . . and without question

Tractor Pins Farmer

This young farmer was known to be a careful worker. He was building a road on his farm, and he had already several times driven his tractor up a steep grade from a ditch to the top of the road without anything seeming dangerous. Apparently, the plough caught on a stone, his tractor was pulled over backwards, and he was killed almost the instant the tractor pinned him.

U.G.G. paid an Accidental Death benefit of \$2,000.00.

Crushed Under Baler

The baler was not operating well, and the farmer slid under to inspect it. He asked his brother-in-law to turn over the motor a few times, and on the first revolution the farmer's head was crushed. In this especially sad case, the farmer had just returned from an Eastern trip on which he had visited his daughter and picked up a new car.

U.G.G. paid an Accidental Death benefit of \$2,000.00.

Removing Draw Pin From Auger

This farmer was using a hammer to remove a draw pin from a grain auger. Somehow, a chip of steel flew off and entered his left eye. This eye had to be removed.

U.G.G. paid \$750.00 as a Loss of Sight benefit.

Burning Straw

While a southern Manitoba farmer was burning straw on his farm, his clothing caught fire and he suffered third degree burns to his left leg, both hands and 25% of his body. Six skin grafting operations were required.

Benefits of \$583.50 were paid promptly on this claim by U.G.G.

Gun Went Off Accidentally

An Alberta farmer insured by U.G.G. carried a 12-gauge shotgun with him as well as some tractor parts. The gun was necessary because a bear was hanging around that district. On his way to repair a tractor, he had to pass through a wire fence built at the edge of a ditch. The bank of the ditch crumbled, he slipped, and the gun went off, killing him instantly.

U.G.G. paid an Accidental Death benefit of \$1,500.00.

Fell From Granary

The wife of a central Alberta farmer fell while she was getting down from the top of a granary after checking the level of grain. She suffered a compound fracture of both bones of the left leg. A leg ulcer and infection developed, requiring extensive and prolonged care. Ultimately, it was necessary to perform a bone graft operation on the leg and treatment is still continuing.

Benefits of \$832.20 have been paid already by U.G.G.

You need complete dependable accident insurance that you can rely on to pay the bills when you or your dependents are injured.

LET UNITED GRAIN GROWERS PAY PART OF YOUR PREMIUM!

NEW BENEFITS ADDED IN 1965

*10% INCREASE IN BENEFITS: Every year you renew, benefits for accidental death, dismemberment or loss of sight automatically increase 10% . . . at no extra cost to you.

Example: after your first renewal, the payment made on loss of life in a farm machinery accident increases from \$2,000 to \$2,200. The following year it increases again to \$2,400, and so on.

*WEEKLY INCOME BENEFIT. If you are disabled by accident, you can claim \$15.00 a week living allowance after two weeks . . . in addition to payments for medical expenses, etc. Again, at no extra cost to you.

You need accident insurance to protect yourself and all your dependents, including employees. All farmers qualify for United Grain Growers' Farm Accident Group policy . . . and U.G.G. pays part of the premium for any farmer whether or not he delivers grain to U.G.G. This is not just a method to get your grain business: this is the most reliable accident insurance you can buy.

Let U.G.G. pay a big part of your premium! This subsidy reduces your cost to only \$2.50 per year. It would cost many times as much at unsubsidized, non-group rates! See for yourself . . . talk to your U.G.G. agent the next time you're in town.



The Farmers' Company

CANADA PACKERS

Annual Report

The 38th year of Canada Packers Limited closed March 27th, 1965. I am pleased to report that new highs were established in respect of dollar sales, tonnage and net profit.

The following is a summary of the year's operations:

	Fiscal 1965	Percentage Increase Over Fiscal 1964	Recent 5-year Average Fiscal 1961 to 1965 inclusive
Dollar Sales	\$615,531,000	2.6%	\$581,596,000
Tonnage*	3,324,000,000	6.0%	2,996,000,000
Net Profit	\$ 8,112,000	30.5%	\$ 5,967,000
Net Profit expressed as a percentage of sales ...	1.32%		1.03%

From the statement of Profit and Loss it can be seen that the net profit for the year and for the previous year is made up as follows:

	Fiscal 1965	Fiscal 1964
Profit from operations	\$7,140,000	\$5,427,000
Income from investments and profit from disposal of fixed assets	983,000	901,000
	<u>\$8,123,000</u>	<u>\$6,328,000</u>
Less interest of minority shareholders in subsidiary companies	11,000	114,000
	<u>\$8,112,000</u>	<u>\$6,214,000</u>

The profit from operations is substantially greater than last year.

The chief factor in this improvement is increased profit in the packinghouse division over the unsatisfactory results of this division in the past four years.

*The tonnage figure corresponds to the tonnage figures in previous years' reports and represents pounds of product sold by the companies primarily engaged in the packinghouse business.



Shareholders will be interested in an analysis of the Company's sales and profit, showing the broad divisions from which they arise:

	(1) All products derived from livestock	(2) Products derived from other farm raw materials	All other products	Sundry income and profits from disposal of fixed assets and investments
Sales	\$345,900,000	\$98,100,000	\$171,500,000	
Net Profit ..	\$ 2,201,000	\$ 809,000	\$ 4,130,000	\$983,000
Net Profit as percentage of sales	0.64%	0.82%	2.41%	
Corresponding percentage for 5-year average Fiscal 1961 to 1965 inclusive	0.44%	0.69%	2.10%	

(1) Includes all meat products and by-products, such as hides, tallow, animal casings, etc.

(2) Includes dairy products, poultry, fruit and vegetable products, etc.

On all products derived from livestock the profit amounted to a little more than 1/5th cent per pound of product sold, or about 1/6th cent per pound of livestock purchased.

Because of intense competition in the industry, profits are still a very small percentage of sales and a lesser fraction of total expenses than in most other industries. This is a healthy condition and places special importance on innovation and efficiency which ensures that the industry processes the producers' livestock at low cost and serves the consumer economically.



During the year the demand for meat was very strong. Canadians consumed a record quantity in calendar 1964: (lbs. per capita)

	Calendar Year 1964	Calendar Year 1963
Beef	78.7	73.8
Veal	7.0	6.7
Pork	51.9	50.7
Canned Meats	4.5	4.4
Mutton & Lamb	3.4	3.9
Poultry	34.5	32.5
Total	<u>180.0</u>	<u>172.0</u>

Canadian farmers marketed a record quantity of livestock and poultry during calendar 1964:

	Inspected Slaughter (number of head)	Percentage Increase Over 1963
Cattle	2,422,260	13.9% (all-time record)
Hogs	7,281,644*	11.7% (highest since 1959)
Calves	750,319	11.8% (highest since 1958)

Marketings Through Registered Stations (in pounds)

Poultry	530,057,000	9.7% (all-time record)
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*Number of hogs graded by Canada Department of Agriculture.

From these marketings the Company, in competition with many other meat packers, was able to purchase and process a record tonnage of meat and poultry.

Because of our programme of planned investment in new plants and improvement in existing plants to take advantage of worthwhile improvements in efficiency, this record production was processed at low expense.



In 1964, Canadian cattle prices declined under pressure of about 14% increase in cattle marketings. Good grade live steer prices in 1964 were below 1963 as follows:

Toronto Market Prices (cents per pound, live weight) Average Monthly

	1964	1963
January	21.83	24.55
February	22.11	22.98
March	22.28	22.46
April	23.00	22.75
May	23.00	23.38
June	23.00	23.96
July	23.31	25.96
August	22.70	25.50
September	23.11	25.00
October	22.43	23.76
November	22.26	23.50
December	22.50	22.33
Average	22.70	23.65
Decline from 1963	.95	

The striking fact is the very steady price during 1964. This steady price encouraged increased consumption of beef. It allowed retailers to concentrate their efforts on merchandising beef without the worry of abrupt price changes.

Average quality of Canadian cattle continues to improve. The percentage of inspected cattle slaughtered which graded Canada Choice and Canada Good (the two top grades in beef) increased to 54.3% in 1964 compared to 52.1% in 1963. The corresponding figure for 1954 was 32.6%.

Canadian consumers have clearly demonstrated their preference for this high quality beef, and Canadian cattle producers continue to do a remarkable job in satisfying the demand.



Canadian hog gradings in 1964 were 7,281,644 — an increase of 11.7%. This is the highest number since 1959.

The national average hog price in 1964 was 26.25 cents per pound, 'A' grade. This was a decrease of 0.9 cents per pound from 1963.

In 1964 Canada's consumption of hogs was very close to the total marketings. While we exported product equivalent to 491,000 hogs, principally to the United States, we imported almost as much from the United States.

In the year, calf slaughter increased 11.8%. The majority of this product was consumed in Canada, although Canada was fortunate in developing some export markets in Europe for limited quantities of high quality veal.

Prospects for 1965 are for a continuing high level of livestock and poultry marketings.



The continued high level of employment and income in Canada has resulted in a steadily increasing demand for high quality foods. To anticipate consumers' wants for an increasing variety of easy-to-prepare packaged foods and convert these forecasts into production requires an increasing emphasis on new product research and marketing.

To help meet these objectives and also to explore new processes, products and ideas in all our fields of interest, we are substantially enlarging our research building in Toronto.

A Vice-President of the Company has been appointed to direct scientific research and long-range planning.



Capital expenditures for the year were unusually large and amounted to \$11,725,000. One of the major items in this expenditure is the construction and equipping of a large new building at Toronto to accommodate manufacture, packaging and shipping of all pork products and cook room products. We believe that this will be the most efficient processing unit of its type on the continent.

Part of this unit is now in operation and we expect it to be completed by September 1965.

Other new units opened during the year were a livestock feed plant at Winnipeg and a poultry processing plant at Sussex, N.B.

Many enlargements and improvements were made at existing premises in all areas of our business to take advantage of worthwhile advances in technology and opportunities for new business.

In March 1965 the Company purchased a majority interest in a meat packing plant in Australia, — Jacksons Corio Meat Packing (1965) Pty. Ltd. This business consists of a substantial packinghouse and freezing works, processing sheep, cattle and calves, and a canned meats plant.

Australia is a major supplier of meats to many parts of the world and your Directors are impressed by the opportunities for future business development there.



Out of the year's earnings \$1,750,000 was set aside for employees in the Profit Sharing Plans.



During the year Mr. G. A. Schell, Chairman of the Board of Directors, retired after 45 years with the Company.

His associates gratefully acknowledge his immeasurable contribution to the success and growth of the Company. Mr. Schell continues as a Director.

Directors report with pleasure that relations with employees during the year have been harmonious and co-operative. This has found expression in the year's result and in that most important of all objectives — the steady improvement of the Company's products.

Toronto, May 15, 1965.

W. F. McLEAN,
President.

*Copies of this Report may be secured on request to
Canada Packers Limited, Toronto 9.*

GUIDE POSTS

UP-TO-DATE
FARM MARKET
FORECASTS

HOG PRICES will continue at high levels at least until late fall in spite of heavy marketings. The surplus over Canadian requirements finds a ready market in the United States where supplies will be short for some months yet.

WHEAT CARRYOVER in Canada at the end of July promises to rise to about the 500 million bushel figure once again, up about 50 million bushels from a year ago.

RAPESEED PRODUCERS who have nearly doubled acreage again this year may find competition in the export market tougher when their crop hits the market. A big increase in U.S. soybean acreage and good oilseed crops harvested in the Argentine point to greater world supplies of oils.

FED CATTLE MARKETS will show only modest price movement for the next couple of months at least. Heavier U.S. marketings in the fall may soften the market a bit at that time.

COW PRICES will continue their downward trend for the rest of the year. This year's drop reflects the relatively heavy marketings at the same time that supplies of high quality beef are large.

VEAL CALF MARKETINGS are expected to continue to be heavy and prices can be expected to do no better than hold about steady at the low levels of recent months.

LAMB PRICES will continue to run above 1964 levels, although they may weaken as the normally heavier supplies of early fall hit the market.

EGG PRICES will gradually strengthen over the next few months as production tapers. Peak will probably be reached in late fall. Production is falling less than expected because producers have kept flocks in production anticipating higher prices.

BROILER MARKETS may weaken slightly in August but heavy summer demand and good prices for red meat assure heavy movement of these birds until the end of the holiday season. However, if the present production trend continues, markets could be overloaded this fall.

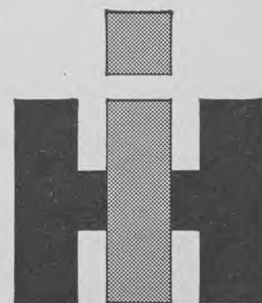
BIG TURKEY CROP is coming to market earlier than usual with some heavies being processed in June. This will make for more orderly marketing and less need for import of special weights.



Three International Favourites

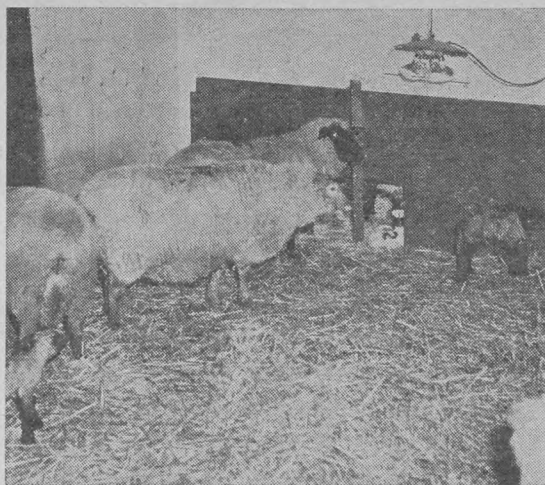
⎓ D-line pickup, Loadstar and Canadian wheat ⎓

Why is Canada's wheat so popular? One word sums it up: *quality*. The same holds true for International Trucks. Take the new D-line pickup for example. It's the best looking pickup you've ever seen. And the best riding. The D1000 model has Velvet Smooth torsion bar ride. Makes gravel feel like blacktop. Steering is smooth and easy. And it's built with the "big truck" quality that has made International the world sales leader in heavy-duty trucks. It has a husky frame that won't twist. And a sturdy truck engine that doesn't strain. All-truck components save you money in bigger trucks too—like the famous Loadstar. Wide track front axle gives good stability on rough ground. And the Loadstar's in a class by itself for comfort and easy steering. Next time you're in town, get the feel of real truck quality. Test drive International pickup and Loadstar *soon*. **INTERNATIONAL TRUCKS**

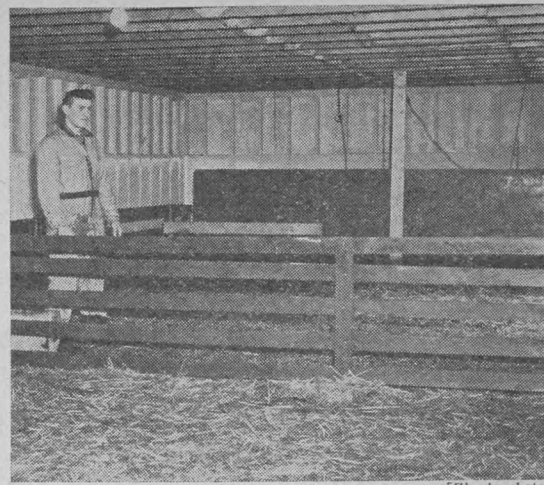




Ewes and lambs are kept in 4' x 4' claiming pens in the lambing barn for 24 hours after lambing



Sheep are turned into enclosed part of shed after claiming. Lambs have access to heated brooder



Well-started lambs go to the open-front area and to brooder at end for warmth and creep feeding

How to Handle

Sheep in Confinement

A dry lot program for the sheep flock at the Agricultural and Vocational College, Fairview, Alta., is paying off well. L. T. Jones reports how he set up the program

ALTHOUGH HIGH PRICES for range land and a shortage of sheep herders has resulted in a shift of sheep from the range to the farm, the sheep business has really changed very little in the past 100 years. Predators still take their toll of lambs, sheep are sheared once a year, and the ewes lamb each spring.

The time for change is overdue and it is becoming apparent that the trend must be toward confinement rearing. Our experience with a flock of 80 breeding ewes at the Fairview Agricultural and Vocational College over the past 2 years indicates this to us.

Under the dry lot system, 34 acres of hay yielded 51 tons, which, at \$15 per ton, was worth \$765. The sheep ate 18.9 tons of this during the May 15-August 1 pasture season, or hay worth \$283.50, leaving an additional \$481.50 worth in the barn.

When a similar 34 acres was pastured during this period, only 17 tons of surplus growth was cut for hay. Valuing this at \$255, it meant the dry lot system resulted in an extra \$266 worth of hay being saved from the same land during the pasture season.

Confinement rearing or dry lot sheep production means rearing ewes and their lambs in corrals without turning them to pasture.

Following are some things to keep in mind in setting up such a system.

SHEDS AND DRY LOT

Sheds must replace natural shelter. If your goal is a 200 per cent lamb crop, the shed must be big enough for two lambs with every ewe. This means you need 15 to 18 square feet of shed space per ewe.

The dry lot must be large enough to give the animals freedom of movement. This means a minimum of 150 square feet for each ewe and her two lambs. The lot should be rectangular rather than square.

Say you plan to have 100 ewes. For average-sized sheep, you would need a shed measuring 30 by 60 feet, and a lot that measures 60 by 250 feet. Be sure there is adequate drainage.

For larger flocks, it is best to duplicate units rather than to build larger ones.

Since the lambs don't get to pasture, they must be fed hay as well as their normal ration of concentrate. Lambs can eat hay from the ewe feeders but 50 per cent more space will be required.

FEEDING PRACTICES

Curb wasteful feeding habits of the ewes that are liable to occur after weaning. Rather than let the ewe continue to eat and get fat at this time, put her into a drying-up pen where feed can be restricted until flushing begins.

We have done this at Fairview for the past 2

Advantages:

- ✓ More ewes and lambs can be carried on each acre.
- ✓ Eliminates fencing posts.
- ✓ Controls internal parasites.
- ✓ Flushing can be more effective.
- ✓ Better flock management usually results because daily care is required.
- ✓ Ewes can be sorted into lots according to feed requirements.
- ✓ Larger flocks require little extra labor.
- ✓ Practices like double breeding and pregnancy testing can boost fertility.
- ✓ A greater incentive for performance testing.
- ✓ Predator losses eliminated.
- ✓ Leads to early weaning, early breeding, and three lamb crops in 2 years (by using light restriction).

Disadvantages:

- ✓ Hoof trimming required because sheep get less exercise.
- ✓ Foot rot may occur if there is inadequate drainage.
- ✓ Nutritional deficiencies may occur if ration not balanced.
- ✓ Contagious diseases could be a problem.
- ✓ Increased labor requirement.
- ✓ More haying and harvesting equipment required.
- ✓ Requires high level of management.

years. It meant that some ewes spent up to 85 days on a ration of 1 lb. oat straw per day with free access to a bonemeal-salt mixture. The practice paid off. The flushing period was so successful that in 1964 the lamb birth rate was 171 per cent while at time of writing this report, with half of the flock lambing, the rate is 204 per cent.

FLUSHING RATIONS

Following this extreme drying-up period, the flushing ration must be high in energy (2 lb. of oats plus all the high-quality hay they want) and supplemented with 5,000 I.U. of vitamin A per ewe. Be sure there is plenty of bonemeal-salt mixture and clean fresh water in front of the ewes. Continue this ration until breeding is complete.

MID-PREGNANCY RATION

During the 8th to 14th week of pregnancy, a simple ration is adequate. The practice of feeding hay on the snow in a field adjacent to the corrals will exercise the pregnant ewes at a critical time.

PRE-LAMBING RATIONS

Since the most rapid growth of the fetus takes place in the last 6 weeks before lambing, a good ration at this time is essential. A full feed of good hay plus 1 lb. of oats will usually assure the birth of large, strong lambs. A month before lambing, bring the ewes back into dry lot. This way, there will be no danger of injuries from crowding as ewes enter or leave the lot.

The dry lot provides another advantage at this time too. Fat ewes can be sorted into groups for reduced feeding. This helps to control relaxed vagina or prolapse prior to lambing.

NURSING RATION

There is plenty of evidence that the fast gaining lambs are the most profitable. The milking ability of the ewe plays a role in this. That's why it pays to feed the ewe a complete ration during the nursing period, particularly in the first month or two.

One problem that crops up with the dry lot system at this time of year is that during the first warm days of summer, the ewe seems to get stale. Feed consumption may drop off. It may be wise to shear early and save some particularly choice roughage for feeding at this time.

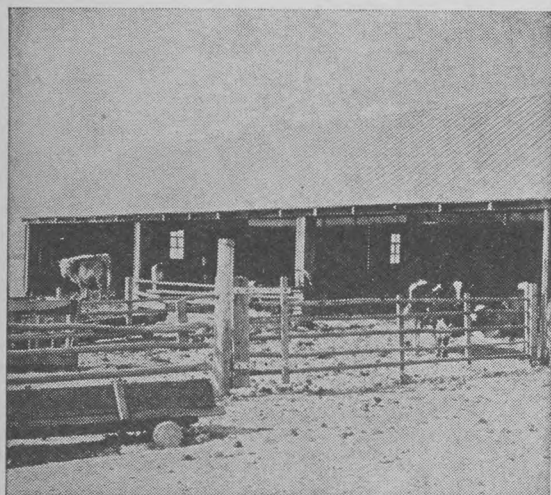
**Don't borrow money
for your farm,
invest credit
in your business**



[Guide photos]
Dick and Jim Cochrane in their farm management center

Invest Your Credit

by **ROGER FRY**
Field Editor



Lacking medium-term credit, Cochranes built this cattle shed with farm labor and current receipts

CLEAR TITLE as soon as possible! That's what Dick and Jim Cochrane had in mind when they borrowed the money to add another 480 acres to their farm at Silverton, Man. They didn't realize it then, but by setting themselves this goal of a clear title as soon as possible, they were making a major error in credit planning. They paid for the error too.

At the time Jim Cochrane had decided to farm with his father, a nearby 3 quarters of land was available. The Cochranes bought it making as big a down payment as they could by using all their cash reserves. They had to borrow only \$9,000, taking it on a 20-year loan with the farm as security. Their intention was to pay off the loan as soon as possible because they did not like the idea of a mortgage against their property, but they had failed to reckon their real needs for capital.

They soon felt the need for more machinery to handle the additional farm so they traded two tractors in on two larger ones. They also traded in their old combine on a newer one. Since then, they have added haying equipment for a livestock enterprise and bought a small crawler tractor to clear land on the new property.

They also added a beef cattle enterprise to market the grain they could not sell in their quota. They couldn't afford to hold it. By careful

control of living expenses and by taking a lot of cash out of current receipts, they were able to add 30 head of cattle, a machine shed, two shed barns and several other buildings. This all came from a cash farm income which was already seriously stretched to cover the short-term credit payments.

Most of the machinery was purchased through Farm Improvement loans because the Cochranes had no cash reserves for developing the farm. By 1964, they owed a total of \$13,000 in short-term loans of 1 to 5 years' duration.

Jim Cochrane described their situation, "We had assets of \$110,000 and were struggling bitterly to pay off \$20,000." Jim gives credit to the Russell Farm Business group for the farm accounting training that enabled him to assess his situation.

It was then they began to get some good advice and work their way out of their difficulties. The Cochranes had borrowed the original \$9,000 from the Farm Credit Corporation. When they discussed their problem with the FCC fieldmen, they were advised to use more of this credit. On this advice they applied for \$22,000 to pay the first mortgage and the short-term loans. The new loan will be extended over a long enough period of time that the Cochranes can easily manage the payments out of farm income without limiting their ability to pay living costs and continue building the farm.

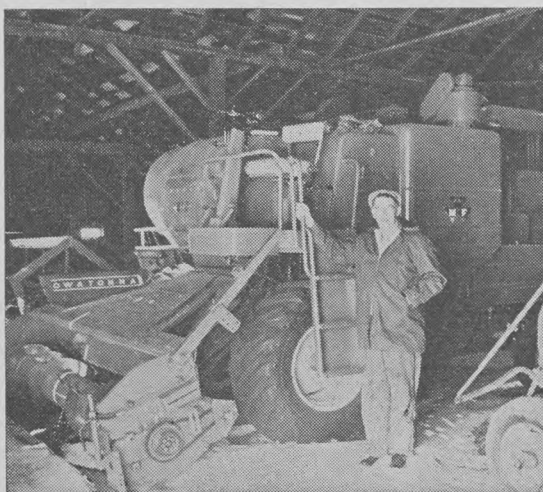
Jim, wiser for his experience, makes this observation concerning credit. "Wise counseling is more important than availability of credit. The mistake we made was to put all our available cash into doubling the farm land. We used too little long-term credit and too much short-term credit."

BALANCED CREDIT

Dr. Clay Gilson, agricultural economist at the University of Manitoba, says that the proper balance of credit is essential in good farm management. "Too many farms are developed out of the current account," says Dr. Gilson. "There is not enough intermediate credit, of 5 to 10 years' duration, to finance livestock herds and farm development. Long-term credit is not a good substitute for this intermediate credit. The loan should correspond to the nature of the investment and long-term credit is designed for more permanent investments such as land and build-



Willis and Jim Kieper with some of the new farm machinery they bought with short-term credit



George McCrindle used short-term credit to buy this equipment, leaving his bond reserves intact

ings." He says that there should also be more emphasis, in farm lending on the "farm management loan" based, not on the physical assets of the farm operation, but on its ability to repay for credit invested in it.

Farmers who want to use credit must carefully study their credit resources. They must realize the risks involved with credit. Those who invest short-term credit in crop costs should carry crop insurance to reduce the risks of this type of operation. Intermediate and long-term risks are best covered by sound planning. No single disaster is likely to wipe out the investor, but mismanagement and poor planning can prevent enough profits to repay credit costs.

Farmers often feel that the safest and best cushion against risks is clear title to their property. Cash resources for operating the farm or expanding it are often seriously limited in the effort to pay off debts and gain clear title. Dr. Gilson suggests that farmers should adopt an investment perspective and think in terms of investing credit in their business rather than in terms of debts and loans that must be repaid immediately. He points out that few businesses have clear title to all their assets.

CREDIT INVESTMENT

Credit investment implies careful, skillful planning and complete knowledge of all the factors that will affect the business. "This is no more complex for the farmer than for any non-farm investor," says Dr.

Gilson. "Of course, an important part of this business is a desk, paper and pencil."

Chris Riddell, of Warren, Man., is making maximum use of credit to build a farm.

His objectives are: a poultry enterprise turning out 7,500 roasters a year for a special market in near-by Winnipeg, Man., 25 head of beef cows on a fall calving program that will turn out finished beef at 1 year of age and enough production from his 240-acre farm to supply the grain for the poultry, as well as the pasture, feed and grain for the cattle.

This adds up to a \$40,000 investment—an ambitious target for a man who had no capital at all 6 years ago.

His father put up the security for a long-term loan of \$15,000 to buy the farm. This is the only long-term credit that Chris has used in his program. Chris's next step was to set up the poultry operation, first in an old barn and then in a new building when the original barn burned down. Finally, he started to develop the beef herd, and now has 20 beef cows.

Chris uses short-term loans to finance buildings and livestock. He uses the profits of the poultry enterprise to pay for this credit and keeps a strict limit on his payments.

Willis Kieper and his son Jim of Silverton, Man., decided to combine their efforts and develop a larger farm. Willis leased some additional land, Jim bought 3 quarter sec-

tions from an uncle. This gave them 3½ sections with about 1,100 acres arable. To handle this land they bought larger equipment: a bigger tractor, a self-propelled combine with 50 per cent increase in capacity over the original combine, and seeding and cultivating equipment to match the larger tractor.

They used a 4-year farm improvement loan to finance the change-over. The Kiepers figured that the increased capacity of their farm would enable them to repay the loan and still earn more money. "Lots of businesses are built on credit. Farmers are a bit slow in realizing the advantages of this," said Willis.

G. A. McCrindle of Foxwarren, Man., is an elite seed grower operating the farm which his father built up. He says he wouldn't mortgage his present farm to buy more land but uses short-term loans to purchase machinery. He thinks such loans are good business. "I could have paid for my machinery with bonds but I don't like to tie everything up so I used a Farm Improvement loan for the purchase."

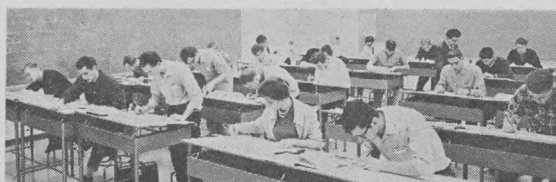
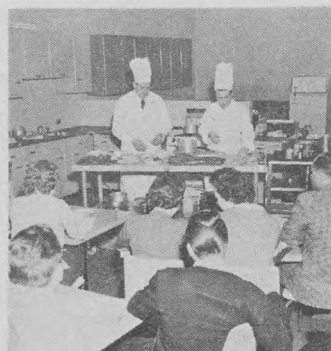
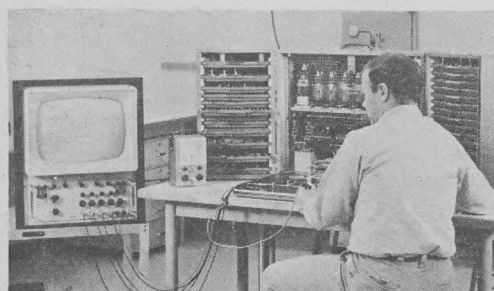
What forms of credit are available to the farmer? The Industrial Investment Bank is available for larger farms. Normal long-term credit can be had from the Farm Credit Corporation and from provincial lending agencies as well as mortgage and life insurance companies. Banks provide short-term credit in the form of personal loans and Farm Improvement loans. Machinery dealers provide a very special form

of short-term credit. Landlords offer another form of short-term credit, land capital.

Dr. Gilson suggests three factors to consider in deciding which source of available credit to use: the cost of credit, the terms of the loan and the lender's ability to advise in management problems relating to the loan.



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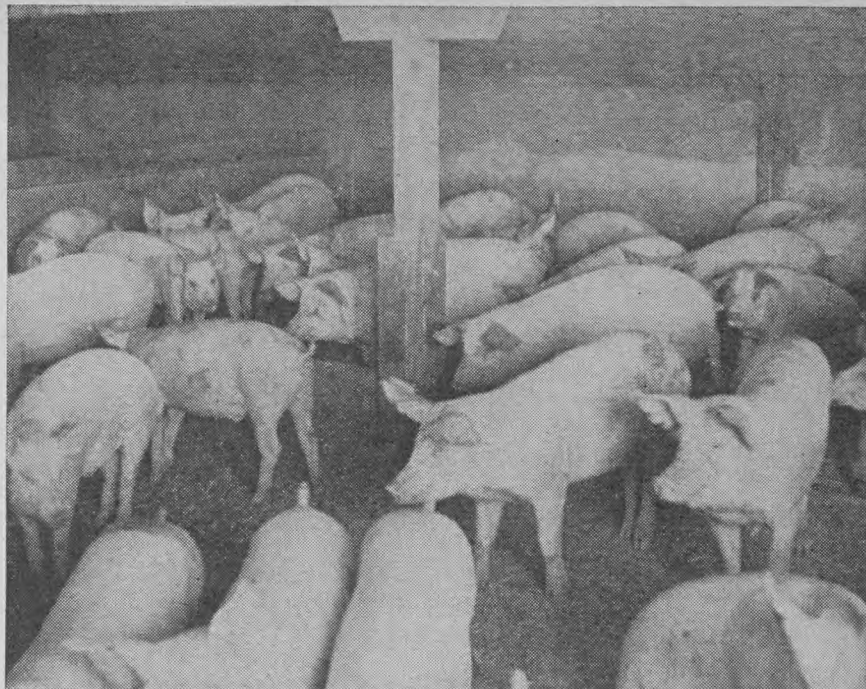
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Grow Grain,



[Guide photos]

Feed Hogs

by **DON BARON**

Editor

Orv Anderson is setting the pace for Manitoba's hog industry. He grows his own grain, feeds it and markets 1,200 hogs each year. Costs are so low other hog producers are beginning to do the same

ORVILLE ANDERSON who farms 530 acres of land in one of the prairie's richest grain-farming areas, the Red River Valley, is leading a trend that could change the face of Western agriculture.

In recent years he has eliminated fallowing from his grain-growing program, sold his cows and cleared the 70-acre woodlot where they grazed, and tried growing cash crops like sunflowers and soybeans. Now, he fertilizes heavily for maximum yields, grows nothing but oats, barley and wheat, and he feeds the grain to hogs.

It's a program identical to the kind that has made the U.S. corn belt the center of hog production on this continent, and which has transformed the Ontario corn belt into the most dynamic farm region in Canada.

Anderson predicts that when more farmers see the opportunity in this kind of farming, Manitoba, with its rich soil and reliable rainfall, will become one of the continent's major livestock areas.

Already feed dealers, supply firms and veterinarians are moving into the area in greater numbers to service the growing number of hog farms.

"The swing to livestock may come quite quickly," Anderson observes. "Land values tripled in the past 10 years. They are still rising. Straight grain farming won't carry the cost of a farm for many more years. As more and more grain farmers feel the squeeze of higher costs and higher taxes, they will need more income. A hog enterprise on lots of farms could provide just that."

"The economics of the system are too good to pass up!" he declares. He recalls that years ago,

when the land was new, barley yields ran 70 or 80 bu. per acre. Now, they have dropped, but he is seeking and finding ways to get those yields back up again. He is growing 50 bu. of barley per acre and is looking for 60 bu. or even more. He averaged 85 bu. of oats to the acre last year. He aims for 30 to 35 bu. of wheat to the acre.

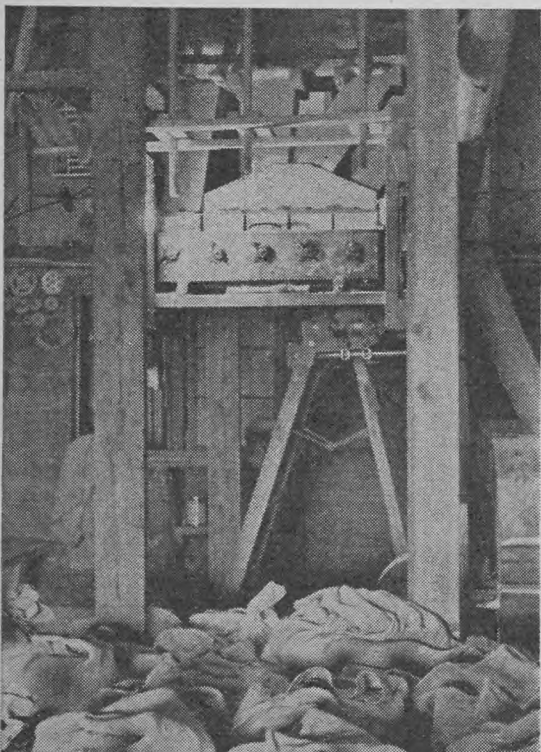
BARLEY AT 50 CENTS PER BU.

In fact, he is growing 20,000 bu. of grain a year, and aiming for more. His costs of growing it are only \$20 per acre—a cost of less than 50 cents a bu. for barley. With this cheap feed he can grow hogs as cheaply as anyone in Canada.

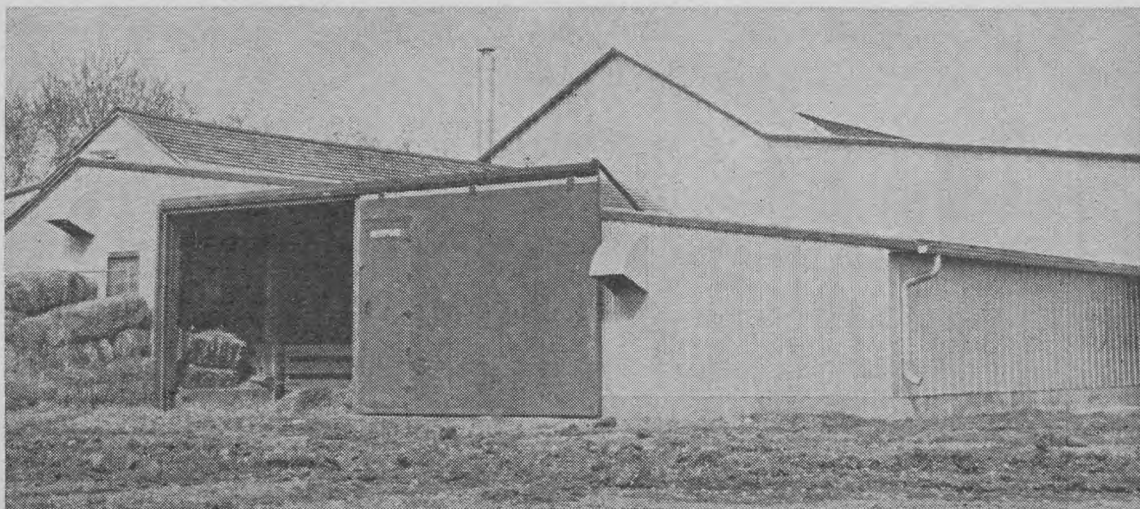
Only 4 years ago Orv sold his last hen (another enterprise he tried) and turned his entire attention to hogs.

Now, his sow herd numbers 75 head and he plans to increase it to 100. He produced and marketed 1,200 hogs last year, and he soon will be up to 1,400 or 1,500.

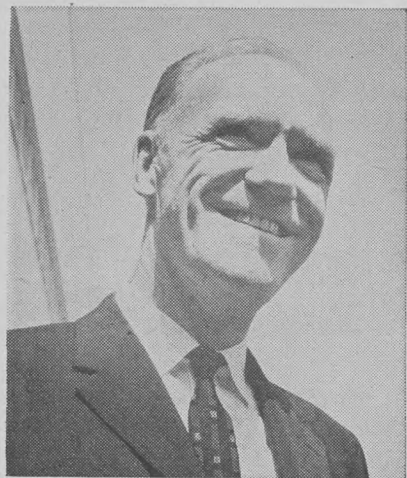
One thing holding back the swine industry in the district, he says, is (Please turn to page 44)



Anderson's hammer mill and homemade mixer with overhead bins. Feed for sows is bagged but hog rations are augered to the self-feeders



This well-insulated building houses the hammer mill, feed storage and mixing setup and some 700 hogs



The Hon. Mitchell Sharp
Minister of Trade and Commerce

IT WOULD BE good news for Canadian farmers if Federal Minister of Trade and Commerce Mitchell Sharp proves to have misinterpreted his crystal ball. Said Mr. Sharp recently, "More than agriculture and the primary industries, secondary industry has the best prospects in international trade." With economic growth, trade expands; however, the proportion of that trade which is agricultural is declining in favor of manufactured exports.

Yet, as Canada Department of Agriculture economist Gordon Dobson points out, "For such products as wheat, rye, flax, forage seeds and maple products, from one-half to three-quarters is exported." The range of other farm exports is wide, their regional impact immense; wheat from the Prairies, potatoes from the Maritimes, apples from B.C. and cattle from Alberta.

We export one-third of our agricultural production and earn one billion dollars in the process; however, we import nearly as much for a small net gain. The big question facing Canadian farmers, as they flex their production muscles, is whether this is good enough. The decline in exports of farm products in terms of total exports may be inevitable; however, the importance of agricultural exports, and the urgent need to increase them, must not be underestimated.

One function of the Federal Department of Trade and Commerce is to encourage farm exports. It does this by arranging for Canada to be represented at international trade fairs (72 during the 18 months ending July 31, 1965). At home, it rolls out the red carpet for overseas buyers. It arranges for trade missions to drum up business around the world.

How does Canada expand its trade? Let's look at our certified seed potato industry, with half a century of quality behind it and substantial markets in the U.S., the Caribbean, South Africa and South America.

In 1950, Canada's Trade Commissioner in Athens, Greece, saw the possibility for seed potato exports to that country. The Department of Trade and Commerce and the CDA,

in co-operation with the Greek Government, established trial fields there. They were so successful that Canada now has a steady market for potatoes in Greece which are sold through export companies known to Trade and Commerce commodity officials. The same team work has been duplicated in sales of forage seeds and oil seeds. However, with the development of a new market, price, quality and quantity, backed by a rigid inspection system, must be competitive with other sources.

Such products as these are well known abroad. However, this is not true of other agricultural exports. Says Donald Shaver, who has blazed a trail around the world for his poultry, "Canadian food products seem to lose their identity abroad. The overseas housewife is made exceedingly aware of the varied product of South Africa, Denmark, Holland, Australia and New Zealand; we need to do something collectively in the food industry to build an image for ourselves."

NATIONAL EFFORT NEEDED

Our competitors achieve their success through a national effort. We blunt our impact by parochial thinking. Rivalry among the provinces in the export field and the wide variety of brands become roadblocks to an expansion of export markets; bickering between Canada's two leading dairy provinces about the quality of cheese can only give satisfaction to our competitors in the market place; the strategy of cheese and bean marketings, as revealed in recent reports, hardly inspires confidence.

Wheat, of course, is the bright star among Canada's agricultural exports. As Mr. Sharp puts it, "Our objective is to enable Canadian wheat producers to move the equivalent of three crops averaging 550 million bushels during the year that is now underway and in the next two crop years; 1,200,000,000 bushels in export and 450 million domestically. Notwithstanding growing competition, we believe this to be a realizable target although, of course, many things can happen in the world of wheat before the middle of 1967, over which neither the Wheat Board nor the government has control."

Canada sets records for per capita agricultural imports; the relative importance of agriculture, in our total export trade, declines. In the conclusion to Trade Perspectives Field Editor Peter Lewington asks

Why Take a Back Seat?

Exports of wheat (which is moving into 75 countries for cash, on credit and as gifts) this year will reach their second highest total in Canada's history and bring untold benefits to the Canadian economy. The quality of Canadian wheat, and the integrity of our grading system, enable us to capitalize on world wheat demands.

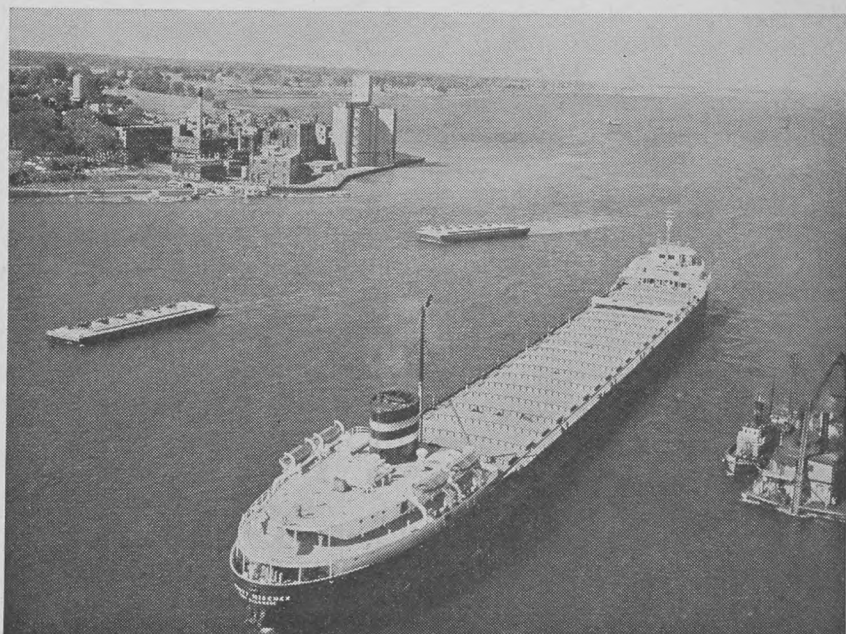
Another factor in the trade perspective is the dominant position of the U.S. market. Fifty-three per cent of our overall exports go there and the U.S. accounts for 71 per cent of our total imports. Feed grains and soybeans earned for the U.S. almost as much as their entire automobile and truck industries. We purchased 17 per cent of U.S. soybean exports and 14 per cent of their soybean meal.

Federal Agriculture Minister Harry Hays claims that we have "a head start as a supplier of animal seed stock for export markets all over the world." Holstein-Friesian breeders, for example, have shown what can be done. They've sent large shipments to Italy, and bulls to Britain. Jamaica is expected to take 1,600 head this year and, at long last, there are possibilities of developing a good market in France.

If exporting the cow helps the Canadian farmer then so will a sustained effort to make her product—in fact, any agricultural product—appealing at home. "Invisible" exports must be exploited. It is a simple matter to tot up the products we export; not so easily measured is the consumption by tourists.

Trade is a two-way street and exports and imports should be explored jointly. In postwar years farmers have followed their products beyond the farm gate. Dairymen advertise, hog men are interested in research to keep their industry competitive; poultrymen have become alert to new packaging and new products. However, have we done enough to capitalize on the domestic market when per capita imports of agricultural goods amount to a whopping \$140?

We began this series 6 months ago with the note that our traditional egg customer, Great Britain, had shipped eggs into the Ontario market; we close with the note that the Maritimes, the citadel of potato production, is now savoring spuds grown in Bermuda. Which brings us to the question we asked in the beginning: with our own production potential, is it really necessary for us to take a back seat? V



Loaded ships come and go from Canadian ports on both seaboards. Yet we end up with only a very small gain in terms of total trade in agricultural products

Prepare Your Combine Before Harvest

This step-by-step outline of how to check your combine can save you grief at harvest time. It is a preview of a booklet soon to be released by the University of Saskatchewan

A **SYSTEMATIC** check of your whole combine during the off season will pay dividends in time and money. Here is a part by part combine check suggested by experts from the University of Saskatchewan's Agricultural Engineering Department.

Frame and Supporting Parts should be inspected regularly for loose or broken bolts and rivets. Make sure that braces are tight and truss rods drawn into position so the frame will be in alignment and all parts in proper relation to each other. On newer machines, inspect frame welds for cracks or breaks.

Wheels and Wheel Bearings should be inspected yearly by removing the wheels and washing the bearings with solvent so they can be checked for wear. When replacing, repack the bearings with grease. For adjustable bearings, tighten until the wheel does not rotate freely, then back the adjusting block nut one notch (or about one-eighth of a turn) and re-lock. Reduce any side play on plain roller bearings by inserting spacer washers on the axles. Check grease seals on all wheels and replace if necessary.

Live Axles or Final Drives running in oil need periodic checking of bearings and oil seals, and any leaks should be repaired immediately. Make sure gear oil is the recommended type and maintained at the proper level.

Tires should be inspected for bruises, cuts and cracks, and kept at the recommended inflation pressure during the working season. Do not overload your tires.

Pickups must be checked before use because they get a lot of abuse from dust, roots and stones. Straighten any bent teeth and replace broken teeth or fingers. You can decrease the rate of wear by having the tips of metal teeth or fingers hard surfaced.

Examine all bearings, slides, cams and rollers for wear and replace if necessary. Chain-type raddles need the same servicing as other conveyors on your machine — belt-type raddles need little servicing but joints should be checked to see if pins and hinges are intact. Tension adjusters on the latter should be kept in good working condition so that adjustments can be quickly and easily made. Cams, cranks and cam tracks should be checked periodically for wear.

Repair bent, dented or damaged drums, beaters or any shielding. Check caster wheels or shoes and their mountings for worn, bent, cracked or broken parts.

Cutter Bars should be in a straight line from end to end. Sagging can be corrected by adjusting truss rods or angle iron supports to the back wind board. If the condition persists, remove the knife and guards and jack the bar until it is

by **CLIFF FAULKNER**

Field Editor

in a straight line. Replace the guards and tighten before the jacks and blocks are removed.

Replace worn sickle sections and ledger plates, and adjust sickle clips so sickle is held in proper cutting position parallel to the ledger plates. Adjust wear plates which hold the knife forward in the cutting position and replace if worn excessively. Worn sickle guide heads should also be replaced to reduce knife play. Check the sickle to see if the knife sections are centered in the guards at both ends of travel. If not, make the necessary adjustments found on the pitman or pitman wheel mounting. Check the pitman and pitman wheel bearings for excessive wear which might cause knife breakage.

Reel supports, and bolts in spiders, arms and slats should be checked regularly for looseness. Replace broken arms or slats. Cams, rollers, fingers and bearings on pick-up type reels should be checked for damage or wear. Belting or heavy canvas may be fastened on the edge of your reel slats to clear short material from the knife to the canvas or auger.

Auger and Canvas Table types may have the sheet metal at the bottom of the table dented or damaged by stones or obstructions. This should be hammered out or patched so it will not strike the auger or canvas and cause binding or excessive wear. Dented bottoms on auger-type tables restrict grain flow and may cause grain cracking. The auger seldom needs attention except for the bearings at either end. Should a central feeder beater with retracting fingers be used, however, check for broken and bent fingers and check the eccentric mounting. Adjust the stripper bar to keep grain from wrapping the auger.

Check canvasses carefully and replace worn buckles and adjusting straps. The flap covering the opening at the joints should cover the opening so grain cannot get inside the canvas to wrap the rollers. Replace worn lagging on rollers and canvas slides, and check roller bearings for wear.

Feeder Housing, Raddle and Beater should be carefully checked for wear. All types of feeder raddles or conveyors are subject to stretching and wear through normal use. When worn, the effective length of each link is increased so that the chain "climbs" on the teeth of the drive sprockets. Adjust tension to that specified in the operator's manual. A tight chain causes excessive wear. A loose chain allows material to bunch underneath so the cylinder is fed unevenly.

Check grain shields and deflectors in the conveyor housing to see they are secure and not

worn thin so that pieces may break off and pass into the cylinder.

Check the feeder beater to see that it is not damaged or out of balance. Replace worn bearings.

The **Cylinder** should be kept clean of dust, checked for balance, and if necessary, re-balanced by adding weight to the light side. If cylinder bars are worn, replace all of them at the same time. However, if a damaged bar needs replacing, the opposite one should also be replaced to maintain cylinder balance. Some cylinders have reversible bars that may be reversed on the cylinder when one side is worn. If you have a spring-loaded cylinder stripper bar, check for condition and freedom of movement.

Concave or Concave Grating bars will not need replacement as often as cylinder bars. Replace when leading edges become rounded so that threshing is difficult. In some machines, the concave can be reversed in its mountings so that square-edged bars are forward.

Check longitudinal bars in the concave to see that none are bent or broken, and that the correct number are used for the size of opening needed for the crop being threshed. When necessary for good threshing, use metal plates for blanking off part of the concave.

Concave hangers need checking to see if they are holding the concave parallel to the cylinder. Adjusting devices for concave clearance should be operating freely so adjustments can be quickly and easily made. If the clearance adjustment is made by a lever and cam on the side of the machine, or from the operator's platform, all linkages should be tight.

Finger grate bars behind the concave should be intact, and if adjustable, checked for freedom of movement.

The **Rear Cylinder Beater** requires little attention except a periodic check to see if all rivets or bolts are tight and that the blades are not badly worn. Worn blades do not strip the cylinder properly.

Deflector or Retarder Curtains, both steel and canvas, should be kept in good repair and replaced if reduced from their normal size.

Straw Walkers, Decks and Raddles should be carefully checked for loose, broken, worn or lost slats, fishbacks or sections that would allow short straw to fall through with the grain. Inspect for loose bolts or rivets which might catch between rotating straw walkers so as to break or twist them, or bend the driving crankshaft.

Adjust wooden bearings by removing shims so that walkers run true and do not rub each other or the metal side of the combine. If walkers do not run true after adjusting, look for bent crankshafts. Return troughs under the walkers should be clean, smooth and in good repair. Hangers, shaker shaft and shaker arm bearings need proper maintenance so there is no lost motion or pounding.

Grain Pan maintenance should include inspection for cracks in the fluted bottoms and frames, loose, broken or worn fishbacks or dividers. Check tightness of the pan. Inspect all bearing blocks and bearings on hangers, shaker arms and shaker shaft for wear and looseness. Where slatted conveyors are used, their maintenance should follow that described for the feeder raddle.

The **Cleaning Shoe** needs little attention except to see that no cracks are developing in the sheet metal and that the shoe runs true with the frame of the machine. You can fasten patches over cracks with tinner's rivets, or you can braze them on with an acetylene torch. The shaker arm hangers and shaker shaft bearings should be maintained the same as those on the grain pan.

Sieves should be inspected for loose corners in the frames and warped or cracked side pieces. Where necessary to prevent sagging, reinforcing strips may be fastened under the sieve on dividers to maintain capacity. Adjustable sieves,

including chaffer, extension chaffer and cleaning sieve should have no bent louvers and all louvers should open the same amount. The adjusting device must be operating freely so sieve openings will be held securely in the right position to handle all crops.

Elevators with flexible rubber flights or drag bars give less trouble than older type metal cups or flights. But periodic checks should be made to see that all flights are operating and none are missing. Check elevator chains for tension. Excessive clearance may cause the chain to jump the sprocket, while a very tight chain will create extra wear and crack a lot of grain. Adjustments will be found at either the top or bottom of the elevator. Allow just a little slack between the lowest part of the bottom sprocket and the adjacent links.

Check the dividing board in the elevator's center for wear and the outer housing for cracks or leaks. Check the cleanouts to see they fit tightly.

Augers should be inspected to see that the spirals are not bent, cracked or broken away from the center shaft. Auger housings need checking for dents, cracks or leaks.

Fans and Fan Housings should be checked for dust, cracks or dents. Dust or chaff in the housing will wear wooden fan blades thin, but will not affect metal blades. If you install new blades see that original balance is kept. When repairing the fan, check wind or deflector boards at the rear. Check the adjusting mechanism, shutters or air valves for full range of adjustment and wear so, once adjusted, they will remain in position.

Slip Clutches, either the flat plate or the chatter type, should be disassembled periodically for inspection. Check plate types for face plate wear. The whole clutch assembly of both types should be washed clean of all dirt and grease before re-assembly. Slip clutch spring tension should be just tight enough to carry a slight overload without slipping but slip when the load is excessive.

Chains should have enough tension so they flow freely from the sprockets without tending to follow around the sprockets as they leave them. They should be run on the sprockets with the hook end leading forward in the direction of travel and the slotted side out.



All steel roller chains should be soaked in kerosene or solvent to remove dirt or grease from the rollers, thoroughly dried and then soaked in an oil bath before being put back on the machine. When replacing a worn chain it is generally best to replace the sprockets on which it runs for they will be worn too. If chains tend to climb on their sprockets it generally means either a stretched chain or that the sprockets are out of alignment. Sprockets can be moved on the shaft to bring them into line, but a stretched chain should be replaced. If you have spring tighteners, check them often as they tend to put too much tension on a roller chain.

Steel link chains should be treated the same way as elevator chains of the same type, and worn ones replaced before they break or start climbing the sprocket teeth. Sprockets with this type of chain need the same care as roller chain sprockets.

Malleable link chains need little attention except to see they are running true and at the right tension. They should run without slapping.

V-Belts used on present-day combines include single V, double V and variable-speed drive belts. Belts for agricultural machines are designated by the letter "H" and specially made for the types of drives on which they are used. Where a belt or pulley is worn so that the belt runs too deeply in the grooves, excessive tension is needed to drive without slipping. Such pulleys or belts should be replaced. V-belts should be as loose as possible and still grip the pulley without slipping under load. Some belts may have to be kept quite tight because slippage in the pulley will shorten both pulley and belt life much quicker than any extra tension on the belt.

Belts should be run as nearly in line and with as few twists as possible. Set pulley so the belt will run freely and not chafe or rub on pulleys or where the belts cross. Loosen all belts when not in use.

Keep oil and greases off your belts. Oil is one of rubber's greatest enemies.

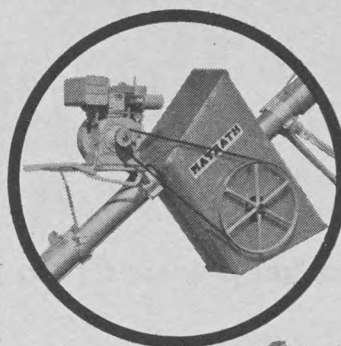
Roller and Ball Bearings, either the standard or sealed type, should be periodically inspected for wear. Bearings, other than the sealed type, should be thoroughly cleaned and repacked with grease, or greased with a gun. Clean all adjustable bearings, and set up as described in the section on "Wheels and Wheel Bearings." Replace worn non-adjustable bearings.

Wooden bearings should be scraped clean of grease and dirt and then soaked in hot oil. They will not need lubrication after this because oil will seep out of the wood to lubricate the bearings. If the bearings are in two pieces, shims may be adjusted to take up wear. ✓

Detailed information on combine care can be obtained from the booklet "Maintenance and Operation of the Combine," Extension Department, University of Saskatchewan, Saskatoon.

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How to Adjust Your Combine in the Field

You can adjust your combine to keep losses to a minimum

COMBINE ADJUSTMENTS are generally interrelated. When one part of the machine is adjusted another part may be affected so that it requires adjustment too. Adjustments are always necessary when you move from one kind of grain to another. They are sometimes needed when you move from one field to another, even when the new field has the same kind of crop. Make these adjustments carefully so as to obtain maximum capacity plus satisfactory separation and cleaning with a minimum of grain loss.

If your combine is losing grain, find out where the losses are occurring and try to balance these losses between the threshing and separating parts of your machine. There are four main sources of grain loss: (1) tables (pickup) or reel; (2) cylinders; (3) shoes; and (4) straw walkers. For best results, operate your combine as near to the machine's capacity as possible.

Table losses consist of grain not picked up from the windrow by the pickup, or grain shattered and not cut and gathered onto the table by the knife and reel. Cylinder losses come from grain not removed from the head which passes over the walkers with the straw. Losses from the shoe are threshed grain or unthreshed heads passing over the shoe, while walker losses consist of threshed grain not separated from the straw, or parts of unthreshed heads passing over the straw walkers.

GROUND SPEED

Match your ground speed to windrow size, or to the heaviness of the standing crop for proper cylinder, walker and shoe loading. Pickup losses multiply with an increase in ground speed. The maximum ground speed for a minimum pickup loss appears to be from 4 to 5 miles per hour. AMA tests have shown that increasing your speed 12 per cent from 4 miles per hour will double the grain loss from 2 to 4 bushels per acre.

The cylinders, shoes, walkers and power unit of self-propelled combines are designed to thresh and separate most grain crops with a minimum of loss, providing the machines are properly adjusted. Increasing the input can quickly overload your machine and cause excessive loss, particularly at the straw walkers. To reduce this loss, adjust the cylinder and shoe as accurately

as possible, then determine the proper rate of feeding the machine by checking straw walker losses. When your walker losses are excessive the only remedy is to cut your ground speed down.

Coming, but probably still very much in the future, is an automatic feed control mechanism for grain combines. Developed by graduate student Orly Friesen at the University of Saskatchewan (Country Guide, October 1964), this device will act as a sort of "governor" to adjust machine speed to the load of grain on the cylinder.

CYLINDER AND CONCAVE ADJUSTMENTS

Possibly the most important adjustments for clean threshing are cylinder speed and cylinder-concave clearance. There are several adjust-

ing mechanisms used on different combine makes and models to give you various cylinder speeds and concave clearances to handle a variety of crops and conditions. You may have to adjust these more than once a day. As the day progresses and the straw becomes drier, the usual procedure seems to be to reduce cylinder speed and increase concave clearance so as to prevent over-threshing and cracking the grain. In the evening, if there is dew, reduce the concave clearance again.

You may find it necessary to plate or blank off part of the concave to get good threshing in crops such as flax, or rape, where pods or bolls are easily broken off their stems.

by **EDWIN DOCKING**

Agricultural Engineering Dept., University of Saskatchewan

When this happens they drop through the concave unthreshed and overload the return.

SPIKE-TOOTHED CYLINDER ADJUSTMENTS

Cylinder speed can be changed, and the number of rows of concave teeth and height of the concave varied, where a spike-toothed cylinder is used. When removed, concave teeth are replaced by blank concaves to reduce over-threshing.

ADJUSTING THE FINGER GRATE

The finger grate behind the concave may need adjustment, depending on the heaviness of your crop.

(Please turn to page 44)

COMBINE PROBLEM CHART

CORRECTION																									
PROBLEM	Adjust Concave	Adjust Cylinder Speed	Replace Cylinder and Concave Bars if Worn	Adjust Feeder Riddle Tension	Adjust Auger Speed Position or Fingers	Adjust Air Blast	Adjust Wind Deflectors	Enlarge Concave Openings	Install Concave Plates	Check Retarder Curtains	Adjust Elevator Chains	Adjust Chaffer and /or Extension Chaffer	Adjust Cleaning Sieve	Reduce Ground Speed	Check for Plugged Walkers or Return Troughs	Increase r.p.m. of Combine	Adjust Cylinder Stripper	Adjust Rear Beater Belt	Check for Plugged Concave	Allow Grain to Dry or Mature	Adjust Walker Drive Belt	Adjust Slip Clutches	Check Concave Levelness	Adjust Concave Finger Grate	Adjust Reel Speed or Height
Unthreshed Heads	X	X	X						X					X						X			X		
Cracked Grain	X	X									X												X		
Over Threshing	X	X						X															X		
Excess Chaff	X	X				X	X					X	X												
Cylinder Plugging	X	X	X	X										X		X		X		X	X			X	
Excessive Return						X	X					X	X							X			X		
Whitecaps in Grain Tank	X	X	X						X											X			X		
Cylinder Feeding Unevenly				X	X																	X			X
Block Feeding	X	X												X			X	X		X	X			X	
Grain Loss Over Straw Walkers	X	X	X						X	X				X	X					X			X	X	
Grain Loss Over Chaffer	X	X				X	X					X		X		X									
Grain Loss over Cleaning Sieve to Return						X							X	X		X									
Elevators Stopping											X									X		X			
Grain Bunching in Front of Auger					X									X											X
Loss from Table					X																				X
Poor Chaff Flotation on Chaffer						X	X					X		X		X									

SAFETY FIRST—NEVER ATTEMPT TO CLEAN, OIL, OR ADJUST A MACHINE WHILE IT IS IN MOTION!



QUICK FACTS ABOUT CANADA'S NEW DAIRY POLICY

Many farmers will have read about changes in the federal dairy policy. Here are some facts you should know.

What is the objective?

Increased returns to farmers for manufacturing milk and cream. On the average, milk shippers will receive \$3.50 per cwt. for milk consumed in Canada. This is not a guarantee to each shipper but to the industry as a whole. (Last year's estimated national average return was \$3.06.)

Who is concerned?

- Farmers who ship **MANUFACTURING MILK** - that is, milk used for butter and powder, cheese, evaporated milk, etc.
- Farmers who ship **FARM-SEPARATED CREAM**.
- Farmers delivering at least 10,000 pounds (two cows' production), qualify for two payments: a Deficiency Payment and a Supplementary Payment.
- Farmers delivering under 10,000 pounds (one cow's production), qualify for a Deficiency Payment only.
- This does not concern farmers who ship to the fluid milk market.

How it adds up

The two direct payments by the government, the **DEFICIENCY PAYMENT (D.P.)** and the **SUPPLEMENTARY PAYMENT (S.P.)** are added to the **FARMER'S PLANT PRICE (F.P.P.)** to make the **FARMER'S TOTAL PRICE (F.T.P.)**.

$$\text{F.P.P.} + \text{D.P.} + \text{S.P.} = \text{F.T.P.}$$

F.P.P. (**FARMER'S PLANT PRICE**). This is the price you get at the plant, after negotiation with the plant owner.

N.A.P.P. (**NATIONAL AVERAGE PLANT PRICE**). This is the average of plant prices across the country and is used in calculating the Deficiency Payment. Last year the N.A.P.P. was estimated at \$3.06 per cwt.

D.P. (**DEFICIENCY PAYMENT**). This payment is the difference between the National Average Plant Price and the support price of \$3.30 per cwt., established by the government, minus any export subsidy.

S.P. (**SUPPLEMENTARY PAYMENT**). A lump sum payment based on 1964-65 shipments and averaging about 20¢ per cwt., to make up the difference between

the \$3.30 support price and the \$3.50 objective price. The S.P. is based as follows:

25¢ per cwt. on the first 48,000 lbs.
20¢ per cwt. on the next 48,000 lbs.
10¢ per cwt. on any shipments over 96,000 lbs.

EXAMPLE: Say you shipped 120,000 lbs. of milk last year. You get:

25¢ per cwt. on 48,000 lbs. = 120.00
20¢ per cwt. on 48,000 lbs. = 96.00
10¢ per cwt. on 24,000 lbs. = 24.00

You receive a supplementary payment of \$240.00

EXAMPLE: Say you shipped 4,300 lbs. fat as cream last year. You get:

7.1¢ per lb. on 1,680 lbs. = 120.00
5.7¢ per lb. on 1,680 lbs. = 96.00
2.8¢ per lb. on 840 lbs. = 24.00

You receive a supplementary payment of \$240.00

NOTE: If your Plant Price (F.P.P.) is less than the National Average Plant Price (N.A.P.P.) your Total Price (F.T.P.) will be less than \$3.50 per cwt. If your Plant Price is more than the National Average, you will realize more than \$3.50 per cwt. So, for the best F.T.P., get the best F.P.P. you can!

EXAMPLE: Say S.P. were 20¢ per cwt. and D.P. 25¢:
F.P.P. \$3.10 + S.P. 20¢ + D.P. 25¢ = F.T.P. \$3.55
F.P.P. \$3.00 + S.P. 20¢ + D.P. 25¢ = F.T.P. \$3.45

REMEMBER!! The objective price of \$3.50 per cwt. for milk used in Canada is a guarantee to the industry as a whole. It does not guarantee precisely \$3.50 for each shipper.

When do you get these payments?

Keep all your pay slips, vouchers and stubs from May 1, 1965 onward. Payment will be made by the government shortly after the end of the dairy year.

Claim forms are being made available to all dairy farmers. Complete and return yours not later than July 31, 1965. Payments will start to go out as soon after that as claims can be processed.

CANADA DEPARTMENT OF AGRICULTURE
Ottawa, Canada



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MEN PAST 40

**Troubled with
GETTING UP NIGHTS
HIPS, LEGS, TIREDNESS,
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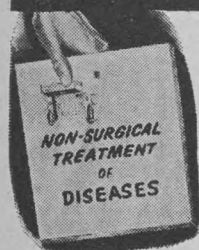
The Non-Surgical treatment described in this book requires no painful surgery, hospitalization, anesthesia or long period of convalescence. Treatment takes but a short time and the cost is reasonable.

REDUCIBLE HERNIA

HEMORRHOIDS

Non-Surgical treatment for both Reducible Hernia and Hemorrhoids, the book explains, can usually be taken at the same time as treatment for Glandular Inflammation.

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Hog Producers Specialize

Over half of Ontario's weanling pigs are sold at least once before going to slaughter

THE FINDINGS of the Ontario weanling pig production and marketing survey reveal the extent of the changes which have swept the industry. The survey is based upon 12,000 usable questionnaires and 450 special interviews. Three broad types of operations were studied: the conventional sow operations, where pigs born on the farm were also finished there; the feeder operation, which relied on purchased weaners; and thirdly, the weanling operation geared to supplying pigs for other farmers to finish.

The number of hog producers has dwindled rapidly and is now

less than half that of 1941. At the same time the survivors have increased the size of their operations and the movement of weaner pigs has mushroomed. Over half of Ontario's three million market hogs are now sold, at least once, as weanlings or feeders. While there are wide regional variations, the overall breakdown in the weaner pig trade is in this proportion: 50 per cent are purchased directly from farmers, 35 per cent at sale barns and the remaining 15 per cent from dealers.

The survey clearly pointed to the necessity of restricted feeding in

Rapeseed Meal in Hog Grower Feed

RAPESEED oil meal from current oil extraction processes can be used as a protein supplement in hog grower rations, according to Dr. J. M. Bell of the Animal Science Department at the University of Saskatchewan. He warns that the grain must not contain rape or mustard seeds or rape screenings because an enzyme present in the raw seed reacts with a compound in the meal to produce growth depressing factors.

Pelleting will overcome the palatability effects of 10 per cent rapeseed oil meal in hog grower rations.

To overcome the effect of palatability Dr. Bell suggests that molasses should be added to the level of 2 per cent and premixed with the rapeseed oil meal.

He also points out that the protein in modern rapeseed oil meal is of very good quality and the price per unit of protein usually favors rapeseed oil meal.

Once-a-Day Feeding Produces Leaner Hogs

PIGS THAT received one feeding a day in Nova Scotia trials produced leaner carcasses than pair-mates fed the same amount of feed in five equal meals. This is the first time that evidence has pointed to improved carcass quality with once-a-day feeding, according to Dr. D. W. Friend of the Experimental Farm at Nappan, N.S.

In the trial, one pig of each pair, designated the "single feeder," was hand-fed all the feed and water it could consume within 30 minutes. Its pair-mate, the "multiple-feeder," received the same amount of feed and water divided into 5 equal meals daily. Feed consumption averaged 5¼ lb. per day.

Both groups of pigs had the same average carcass weight at slaughter but there were large differences in carcass quality. The single-feeders

had 13 per cent less shoulder fat and 4 per cent more loin eye area of lean. They also had 12 per cent less backfat over the loin eye muscle.

Although once-a-day feeding produced leaner pigs in this experiment, Dr. Friend cautions that its effect on group-fed pigs is not known.

Vermiculite Safe for Animal Feeds

VERXITE, a purified form of vermiculite, can be safely used in formulating feeds for calves in spite of its high silica content, according to C. B. Bailey, animal physiologist at the Canada Department of Agriculture Research Station, Lethbridge, Alta.

Verxite is used as a carrier to incorporate micro-nutrients into feed and as a lubricator and binder in the pelleting process. It also is used to prevent caking or packing of feeds that contain difficult-to-handle ingredients such as molasses, fish solubles, and fats. It may also be used as a non-nutritive bulking agent.

Verxite is about 40 per cent silica and if it is used in feeds to the maximum allowed under the Feeds Act, they would contain 3 per cent silica. It is well-known that feeding prairie grasses high in silica can cause urinary calculi. An experiment was carried out at Lethbridge to find out if the silica in feeds containing verxite would also cause urinary calculi.

In the trial, 3 rations were fed to calves. These were: alfalfa hay, which does not cause silica calculi; prairie hay; and alfalfa hay pellets containing 9 per cent verxite. The alfalfa-verxite ration contained as much silica as the prairie hay. The calves were fed for 200 days, then urine samples were obtained from each calf to be analyzed for silica and the calves were slaughtered and examined for calculi.

The calves on the alfalfa and

Livestock

order to achieve an "A" carcass with the caliber of swine generally available. The source of supply of weaners, however, resulted in wide variations in quality: pigs born and finished on the same farm averaged 51.8 per cent "A"; sale barn weanlings averaged 42 per cent "A"; while the weanlings purchased from dealers averaged 39.9 per cent grade "A."

While the survey confirms that care in feeding can, to some extent, mask inferior breeding, it also points to what can be done with good breeding; pigs can be bred to produce a high proportion of grade "A" carcasses when full fed on high-energy rations. Swine in Ontario now account for 10 per cent of all farm income in the province and for one-third of the national hog production.—P.L.

those on alfalfa-verxite rations contained negligible amount of calculi and had little silica in their urine. Calves fed prairie hay were found to have considerable calculous material and their urine contained 4 times as much silica as did the urine of the other calves.

Bloat— an Enzyme Does It

BLOAT IN cattle may be caused by an enzyme which occurs naturally in forage.

A reaction between the enzyme and pectin, which also occurs in forages, produces pectic acid. This acid then reacts with calcium to produce the sticky substance which traps bubbles of carbon dioxide and other gases in the rumen. This chain of reactions produces the typical frothy material that causes bloating.

The enzyme, called pectin methyl esterase or PME, was isolated by scientists at the University of Wisconsin. They found that the more PME there is in forage, the more likely it is to cause bloat. Alfalfa hay contains about 4 times as much as grass and green alfalfa about 18 times as much.

The researchers also tested brome-grass, birdsfoot trefoil, and alfalfa



after it had been frosted at a temperature of about 27°F. Here again they found the great difference in the content of PME. Bromegrass had the least and birdsfoot trefoil about 10 times as much. Frosted alfalfa contained 16 times as much as bromegrass.

Studies are continuing to find out how to control this enzyme and thus the bloat problem. V

Antibiotics in Pig-Starter

YOUNG PIGS in 2 field experiments gained more rapidly on starter rations containing 5 lb. of Aureo S.P.-250 per ton of ration, according to Dr. J. P. Bowland of the Animal Science Department at the University of Alberta.

In the trials alternate litters were fed either regular starter rations or the same starter with Aureo S.P.-250 replacing the antibiotic at equivalent levels. V

Plastic Boots for Visitors



Plastic boots to cover visitors' shoes [Guide photo]

CLARENCE EDWARDS, of Stonewall, Man., is proud of his hogs and doesn't like the idea of refusing to let visitors go through the barns to look at them. However, he is concerned about hog diseases coming to the farm on the shoes of casual visitors.

Clarence has solved the problem by keeping a supply of cheap plastic boots on hand for visitors to slip over their street shoes before they go into his barns. He gets the boots from his feed supply dealer and considers that hospitality is cheap at 15 cents a pair.—R.F. V

For Healthy Swine Herds

DR. C. L'ECUYER of the Animal Diseases Research Institute made a plea for systematic swine herd health at the Ontario Swine Improvement Conference.

"Diseases," he said, "particularly scour problems and respiratory infections, are more severe where management factors are deficient. Crowding, poor sanitation, improper ventilation, housing or feeding are all too frequently encountered today."

Dr. L'Ecuyer makes these suggestions to hog men:

- Reduce losses by culling sows which have poor mothering ability

Cut Feeder Losses by Careful Selection

ONE-THIRD of the steers on feed lose their owners \$26.50 in potential profit, according to Dave Young of the Canada Department of Agriculture, Livestock Division.

Young bases his estimate on ROP records for beef cattle from 1956-63. About 20,000 calves came under test during those years. Male calves numbered 9,400. The top 3,000 of these, from a rate-of-gain point of view, put on 0.62 lb. more daily in the weaning period than did the bottom 3,000 bull calves. The difference increased to ¾ lb. per day in the feeding period.

The weighted average difference of ¾ lb. between the top and bottom male calves on feed is equal to 126 lb. of beef during the 168-day feeding period.

A steer gaining this much more in the feedlot does so on relatively less feed, and at today's prices returns the feeder about \$26.50 more than the less efficient steer in the bottom performing third.

Selecting both sires and dams from the top third within the herd, or eliminating animals in the bottom third, will increase returns to the producer. V

Hog Crosses Increase Cut-Out

TOP QUALITY Hampshire and Poland China boars crossed on Yorkshire sows will produce progeny equal or superior in cut-out value to Lacombe sired crossbreds.

In trials at the University of Alberta, Hampshire boars consistently sired cross-bred progeny with hams and loins that were heavier when trimmed than hams and loins of the Canadian crosses and with bellies of equal quality. Poland China boars sired cross-bred progeny with heavier hams but, because of shorter carcasses, these crossbreds showed no consistent advantage in trimmed loin. The Poland China crosses were also fatter and produced lower grading bellies than the other crosses, according to Dr. J. B. Bowland of the Animal Science Department of the University of Alberta.

The average advantage in cut-out value for the Hampshire crosses was

and any breeding stock which leaves heritable defects.

- Use additives sparingly.
- Do not depend on antibiotics to replace good hygiene.
- Design the feeding program to maintain a good level of growth.
- Expose the baby pig to an absolute minimum of stress.
- Control anemia and parasites to get better efficiency.
- To control disease, restrict visitors and buy healthy stock.
- Periodically depopulate and clean the finishing barn.—P.L. V

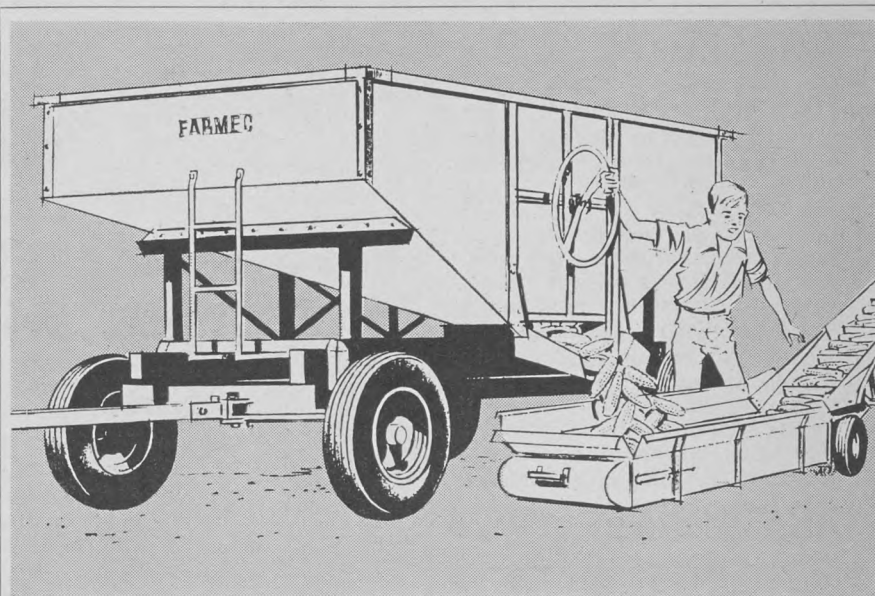
50¢ per cwt. This is equivalent to increasing the Grade A's by 50 per cent, e.g., from 30 to 80 per cent, which is no small achievement. Unfortunately, none of this increase from better cut-out would be returned to the producer because grading standards do not reflect the heavier hams and loins that the U.S. crosses would produce.

It would be risky for a producer to use Poland China boars for crossbreeding but in the trials at the

University of Alberta careful selection among Hampshires minimized all the problems of grading except color.

Hampshire and Poland crosses produced 1 lb. more trimmed ham per carcass than the Lacombe crosses. The Hampshires also consistently sired heavier trimmed loins.

The Hampshire could be readily utilized to improve loin and ham development in Canadian bacon-type breeds. V



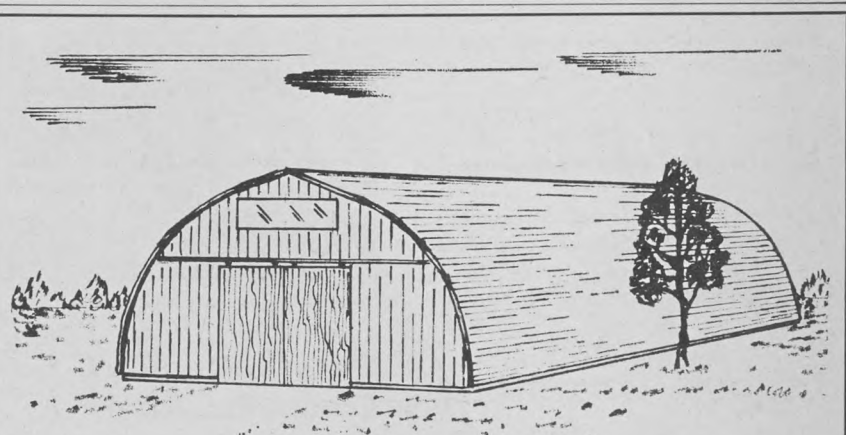
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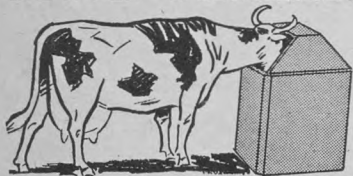
Most important of all—results were so thorough that this improvement was maintained over a period of many months.

This was accomplished with a new healing substance (Bio-Dyne) which quickly helps heal injured cells and stimulates growth of new tissue.

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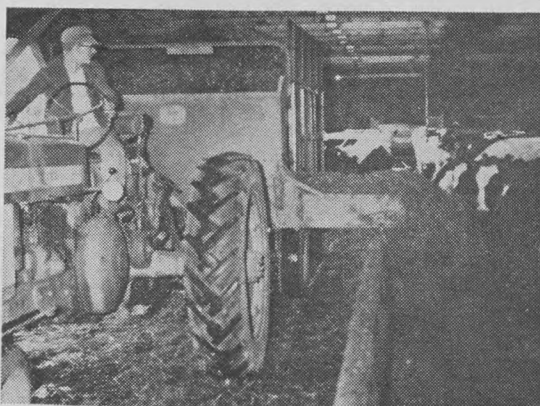
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Order now while stock lasts. Send money order or \$10.00 deposit on C.O.D. to:

R. SMITH

26 Rampart Bay Wpg. 19, Man.

Inside feeding works well if there is a good manure disposal system



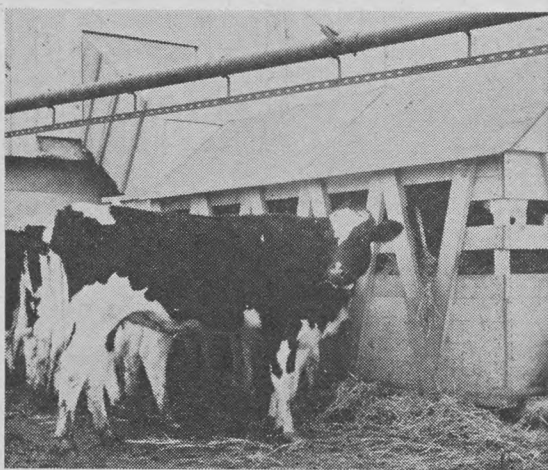
[Guide photos]

Feed Inside or Outside with Free Stalls

WHERE DO YOU feed dairy cattle when you switch to free stalls? It's a simple question, but the answer may be anything but simple. Feeding can be done quite satisfactorily either inside the barn or in the yard. For a feeding system to work satisfactorily, however, it has to be incorporated in the basic free-stall plans.

Charlie Munro, of Embro, Ont., chose outside feeding when he modified an old barn for 42 free stalls for his Holstein heifers. The layout of the stalls permits the heifers to be run in two separate groups; a hay feeder and a silage bunk split the yard so that the younger heifers are able to feed without competition. The hay feeder is filled with baled hay via a chute connected to the barn, while the silage is run out in a cart suspended from the litter carrier track.

Paul Varney, of Turner Centre, Maine, is able to feed his large dairy herds inside the barn because he made topography work for him when he laid out his barn which includes 112 free stalls. The barn is built across a gully which was adapted as an economical storage pit for the 'sloppy manure which is inevitable with inside feeding and free stalls. Varney has a group of free stalls at each end of the barn, the one for a Holstein herd, the other for a Jersey herd. The paved area between these two sets of free stalls is used as a feeding and exercise area for this total confinement operation. When a large central manhole is removed, the entire area can be scraped clean in a few minutes. Large concrete feed bunks, at either side of the manhole, are filled directly from the forage wagon. —P.L.



Outside feeding of hay and silage work well for Charlie Munro, of Embro, Ont.

Ontario Quality Cream Program

CREAM SHIPPERS in nine Ontario counties will be included in the Cream Quality Improvement Program of the Dairy Branch of the Ontario Department of Agriculture. This program was started in 1964 and is now being applied to 16 counties in all. It will involve producers shipping to 90 of Ontario's 150 creameries.

The program involves a quality check of each producer's cream at

the creamery plus a visit by fieldmen to those farmers who produce lower grades of cream.

At the creamery, temperature, flavor and acidity will be tested to determine the effectiveness of each producer's cooling methods and sanitation. Each will be notified concerning the grade of his cream.

Producers with low grades will receive advice on improvements that they need to make in their equipment and cooling facilities to bring up the grade of their cream and their returns.

Dairy

Dairy Payment Forms Issued

SOME 200,000 registered shippers of manufacturing milk and cream have received claim forms for the supplementary payment provided for in the new interim dairy policy.

The policy, which went into effect May 1 for an 11-month period, is aimed at providing a national average return to producers of \$3.50 per cwt. for manufacturing milk used in Canada, with equivalent assistance to cream producers. This will be done with a deficiency payment program based on a support level of \$3.30 per cwt. and a supplementary payment.

The supplementary payment, which will be made to the shippers when they have filled in and returned their claim forms, will be based on 1964-65 sales. To be eligible, you must have sold at least 10,000 lb. of manufacturing milk in the year. Payment will be at the rate of 25¢ per cwt. for the first 48,000 lb.; 20¢ per cwt. for the next 48,000 lb., and 10¢ a cwt. for everything over 96,000 lb. Producers delivering any portion of their milk to the fluid trade will not be eligible. Cream shippers will receive approximately 7.1¢ per lb. for the first 1,680 lb.; 5.7¢ a lb. for the next 1,680 lb. and 2.8¢ a lb. for everything over that. Cream shippers must have sold a minimum of 350 lb. of butterfat to be eligible for the payment.

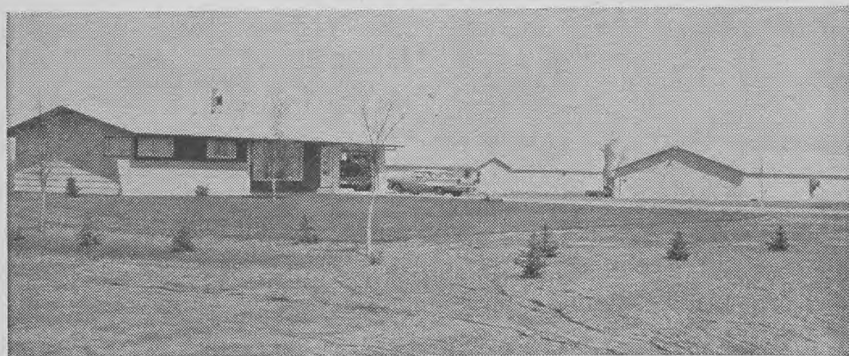
If you have not received your claim form, get in touch with your processing plant or write to Data Processing Services, Canada Department of Agriculture, Ottawa. You should mail your claim by July 31 to ensure consideration.

Tests Show High Mastitis Rate

ALMOST 50 per cent of the cows tested in the first 2 months of the Ontario Department of Agriculture's voluntary mastitis control program have been found to have mastitis. Before the program was started, it was estimated that only 30 per cent would be infected.

Dr. Howard Neely, extension veterinarian, Ontario Department of Agriculture, reports that in the first 2 months of operation, 120 dairymen had already enrolled their herds and were actively participating in the program. "Each of these animals — over 3,300 milking cows — will have quarter milk samples analyzed every 6 weeks for the 6-month period. That's about 66,000 samples!" Enrollment for a 6-month period costs \$2.25 per cow.

The dairymen did not enroll their herds because they were aware of a mastitis problem. "Most dairymen in this program enrolled because they are good managers. They wanted to improve their production, reduce their mastitis problem, and produce milk of the finest quality," he said.



Friesen's farm with the new house and the two 40' by 200' pullet houses [Guide photo]

Raising Pullets on a 40-Acre Farm

A YOUNG fellow who wants to farm must start somewhere. That's what Ed Friesen decided. He was raised on a farm in the Morris district of Manitoba, and tried an assortment of jobs and trades including carpentry and plumbing after he left home. He bought 40 acres of land from his grandfather too (in his community, 40 acres is the minimum which can be taxed as a farm rather than as a residence) and when he got married in 1959,

he began to build a house and landscape the grounds.

He's a full-time farmer on that 40 acres today, and the farmstead is as attractive as any you will find across the country. He built the freshly-painted bungalow himself. He laid out the spacious lawns around it, and planted the shelterbelts that protect it from the sweeping winds that roar across that level country. He laid out the gardens, rockeries and the garden fences too.

To Ed and his wife, this is very much a home in addition to being a farmstead. Across the yard from the house are two long plywood buildings which indicate the farming that Friesen has turned to. On 40 acres, you can't be a grain or a beef farmer, but you can have poultry.

Friesen found that, because he lived in a district where he could borrow through the local credit union on the strength of his good name and reputation, he could get started in poultry.

Two years ago big laying flocks were being established in his community. Some of the flock owners wanted to free themselves of the chore of raising their own pullets. Ed decided to go into the business of raising started pullets for them.

He was turned down on a Farm Credit Corporation loan, but he borrowed from the local Credit Union, and got a Farm Improvement Loan as well. Then he got a contract with a local flock owner to produce pullets. His two buildings measure 200 feet by 40 feet and have capacity for 7,000 birds each. They are equipped with brooders. He can now raise 28,000 birds a year, and he gets paid 50 cents per bird for doing it.

Of course, he must provide good

management, so he will turn out excellent pullets.

In these early years of his enterprise, he works under supervision. The owner of the chicks who also provides the feed, keeps a close check on birds from the time they go into the brooders, but that suits Friesen fine. As he admits, he had a lot to learn when he started. He gets plenty of help from the local hatchery representative too. If any problems come up, he can phone him and get him there within hours, to recommend any needed remedy or precautions.

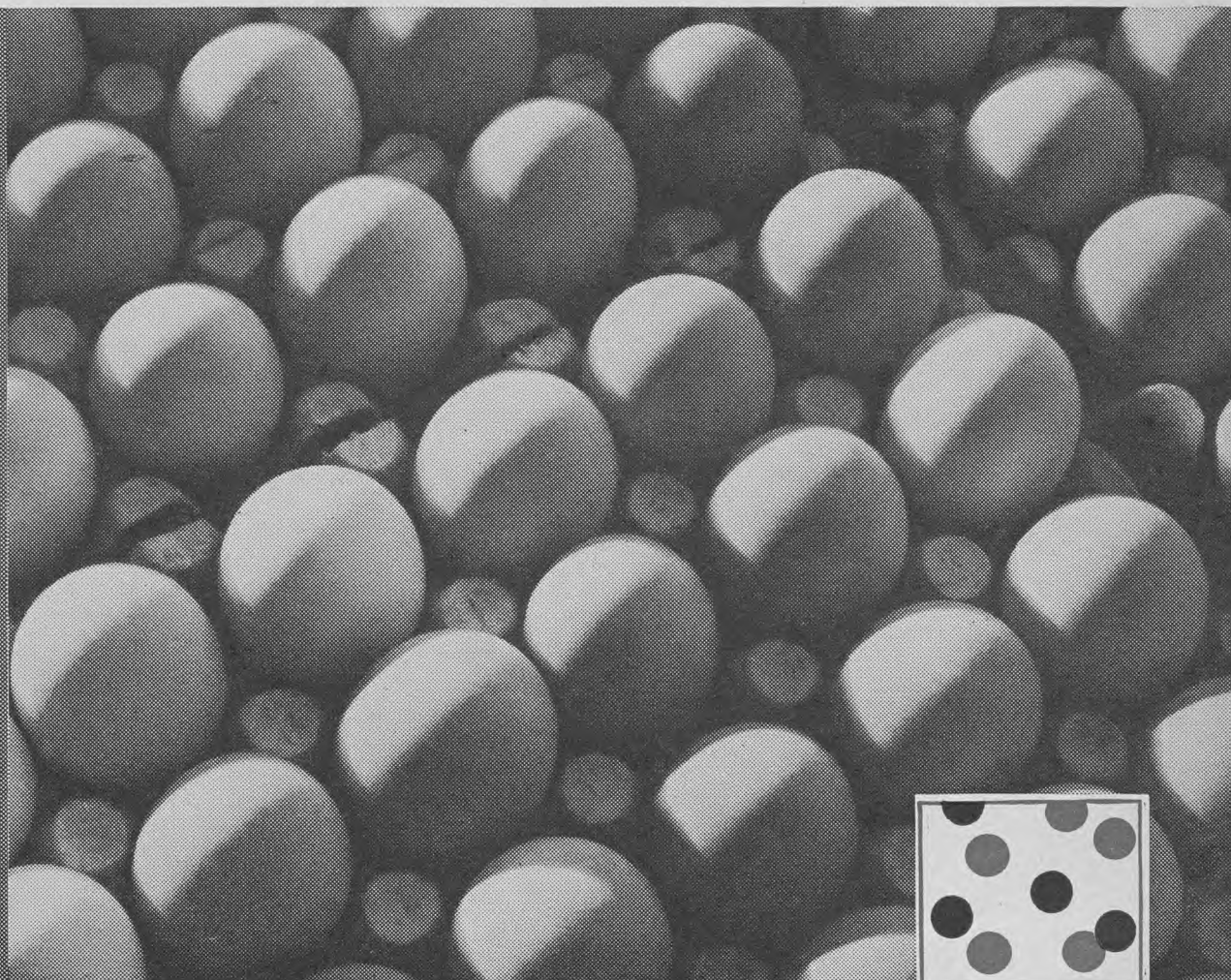
Since Friesen manages his unit as a one-man operation, his buildings must be set up for convenience. Feed is delivered in bulk to outside storage bins. It is augered to the birds in one building, hand-fed into the other.

As part of his strict program of sanitation, the doors are kept locked when he is not working in the houses.

For Ed Friesen, a specialized poultry farm on a small acreage has been the answer to his needs. He has proved that you don't need a lot of ready cash, or a big acreage, to get started farming today. Once he has paid off some of his present bills, he hopes to move toward greater independence for his enterprise. — D.R.B. V

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feeders
across
Canada
choose

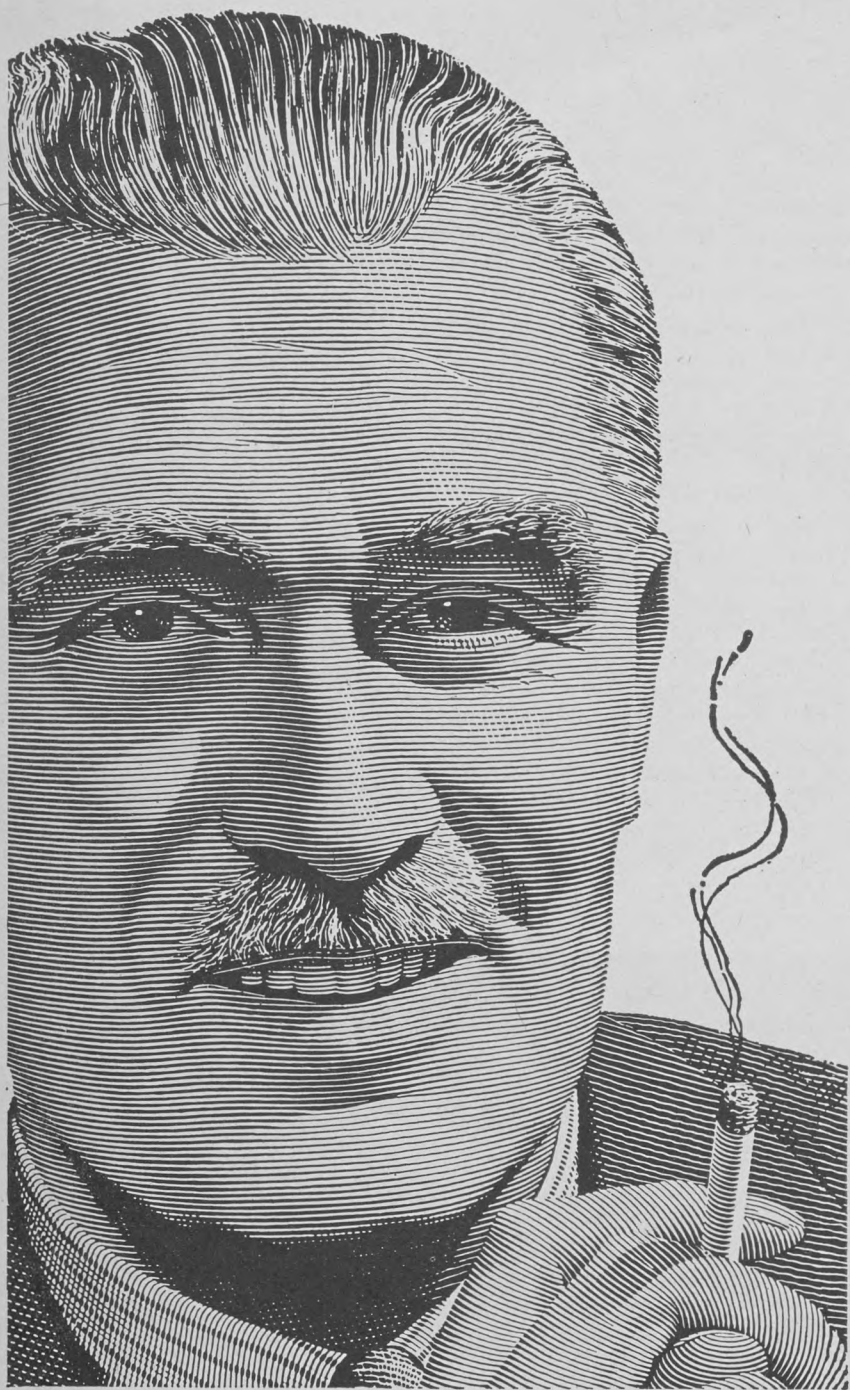
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Horticulture

Care Improves Both Flavor, Yield of Rhubarb

BECAUSE IT IS hardy, rhubarb is often left to grow as best it can in a patch at the bottom of the garden. This is regrettable according to Alberta horticulturist Robert Simonet. He says "few plants respond to care as quickly as rhubarb, or give greater rewards in terms of improved flavor and increased yield."

Mr. Simonet saw the need to increase the yield from his rhubarb gardens and began a program of crossbreeding when he was shipping large quantities of rhubarb into the Edmonton market.

As a base stock he chose the MacDonald variety for its hardiness and crossed it with Early Sunrise variety. From this cross came the new Cherry-red rhubarb now sold across Canada.

"Once you have a mild, tender selection, you must take care of it," Mr. Simonet advises. In his experience, rhubarb does best in rich, rather light soil and it needs a lot of water. With a top-dressing of well-rotted manure each fall a rhubarb plantation will last for several years.

If the original patch is planted in well-manured soil, it will only need fertilizer every 2 or 3 years, he says. Roots should be split as necessary—usually about every 3 years. A single eye will produce a new plant but, for best results, he suggests taking two or more eyes from the old root for each new plant.

Watch how you pick rhubarb. "Always take the stalks from the middle of the plant and so leave the outer leaves to feed the roots and produce new leaves. If you take all the leaves, you weaken the roots. Then, not only the yield suffers, but the quality too. This way we have good rhubarb from spring through to September," he says.

"Few vegetables freeze as well as rhubarb," according to Mr. Simonet. "Mash some of the rhubarb, add this juice and mash instead of water to the container and the flavor will be more like fresh rhubarb," he points out.

For those who are prepared to sacrifice some rhubarb roots, it's possible to have garden fresh rhubarb throughout the winter. Dig the roots in the fall before freeze-up, split them as required and then cover them with straw or some such protection. Next, let them freeze firmly. It doesn't matter how long they remain frozen as long as they are frozen before they are planted.

Then plant them in moss, zonolite or soil and keep them either in the basement or a warm building. To induce healthy growth, water the roots regularly and you should have fresh, tender rhubarb all winter long.

However, one root will not go

on producing, Mr. Simonet says. You must have a succession of frozen roots on hand to bring in for their brief period of indoor production. —Rachel Kilsdonk.

Peat Ups Potato Yields

PEAT FROM nearby bogs increases potato production in Gray-Wooded soils according to CDA researchers at the soils and crops substation at Wabowden, Man. The reason: peat improves soil fertility, structure and moisture-holding capacity. By working peat in to a depth of 2 inches they doubled the soil's nitrogen content; and they tripled it by applying the peat to a depth of 4 inches.

However, growers can't expect immediate results, because the decomposition of the peat is slower in the generally cooler temperatures of the Gray-Wooded soil areas.

At Wabowden, peat applied in 1961 did not produce results until the second year. But, in 1963, plots treated with 4 inches of peat produced 290 bushels of potatoes compared to 217 bushels from untreated plots. The intermediate application gave a 278-bushel yield.

Although yields were down in 1964 the plots treated with peat in 1961 again produced the most potatoes. The yield after the 4-inch application amounted to 244 bushels an acre while untreated plots produced 113 bushels to the acre.

New Control for Potato Beetles

COLORADO potato beetles are becoming more resistant to DDT. Growers from Manitoba to southern Alberta reported resistance in 1963, even at 2 lb. per acre of DDT. Laboratory tests in 1964 showed that the beetles have become 4 to 5 times more resistant than they were in similar tests in 1957.

The chemical guthion looks like the best alternative, according to S. McDonald of the Canada Department of agriculture Research Station at Lethbridge. He said that in trials the chemical showed satisfactory control at 4 oz. per acre.

Guthion has definite advantages: it has been registered for use by the Food and Drug Directorate, breaks down fairly quickly, and could be applied up to 7 days before harvesting. However, it is very toxic and McDonald warns that it should be handled carefully.

Aldrin and dieldrin have also given good control but they persist longer in the soil and there is greater danger of residue contamination of the crop.

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Clare Burt—well-known farmer, agricultural consultant and broadcaster.

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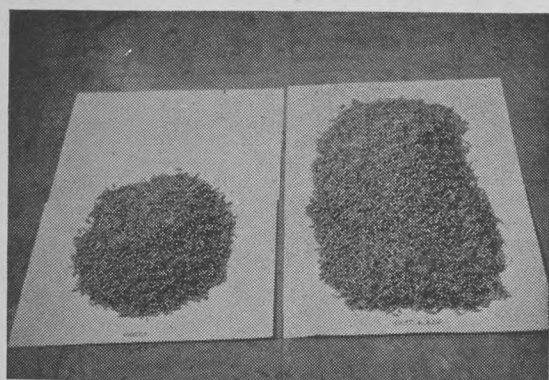
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CANADA LTD.



The fertilizer more than doubled oat yields, as indicated in the samples from fertilized and check fields

[Guide photo]

Fertilizer Doubles Oat Yields in the Yukon

LAST SPRING Northwest Nitro-Chemicals sent 1,000 lb. of commercial fertilizer up to the Bradley brothers at Pelly River Ranch, Yukon Territory (Country Guide, Jan. 1964) just to see what it would do for the ranch's feed situation. Winter feed supplies are the limiting factor to cattle raising in the Yukon. The retail value of the fertilizer was about \$30 but the freight bill was about \$60. In other words, commercial fertilizer would cost \$180 a ton in the Territory.

The fertilizer was sent to Midway Lodge (McCabe Creek P.O.) on the Whitehorse-Dawson highway where the Bradleys picked it up for the 26-mile haul over their tote road to the ranch. When they got to the south bank of the Pelly (across from the ranch) they found that the ice was too soft to take the truck. Trapper Jared Wilkinson of Pelly Crossing obliged by taking the sacks over by dog sled.

This winter, the Bradleys shipped Country Guide two samples of fer-

tilized oats and two samples from an unfertilized check strip. Each sample came from two 16½-foot rows with a plant spacing of 6 inches.

Through the co-operation of the staff at the Lacombe Experimental Farm we had the samples threshed in a plot thresher. There were 700 gm. of oats from fertilized rows and 299 gm. of oats from the check rows.

Said Hugh Bradley, "The field these oats were grown on was broken from sod 9 years ago. It was broken in the spring and worked well all summer. Since then, there have been nine crops of oats grown there. Four years ago, we applied

manure at about 8 to 10 tons per acre. Yield over the whole field was 40 bushels to the acre. This is slightly less than last year, but a couple of draws were flooded during the high water late in June.

"I put some nitro-cubes (33.5-0-0) at 200 lb. on a patch of our small night pasture for milk cows. The fertilized patch was noticeably earlier in starting. It was pastured lightly all summer, and at the end of July we took a cut of hay off it. Regrowth on the fertilized patch again was much better. I didn't keep any yield data on this, but I would guess the fertilizer gave it at least a 200 per cent increase."—C.V.F. ✓



This is the hard way to haul fertilizer—by dog team. But it was the only way to get it in to Pelly River Ranch

[Bradley photo]

Semi-Dwarf Winter Wheat Under Study

WINTER WHEAT breeding at Ontario Agricultural College is aimed at developing high yielding semi-dwarf varieties. Early attempts to develop such varieties were discouraging because yields of dwarf and semi-dwarf wheats were often low. One reason was that the short plants carried with them susceptibility to mildew, rust and other diseases. Also, shortening the culm by as much as 24 inches resulted in leaves lying closely upon one another and this, coupled with large, flat leaves, prevented light penetrating to lower leaves. This meant low light utilization and, since light is needed in photosynthesis, lower grain production. As high as 90 to 95 per cent of the total weight of a plant comes from food manufactured in photosynthesis so that good light penetration is needed for maximum yield.

Early semi-dwarf lines were so discouraging that many breeders doubted that it would be possible to develop a high yielding, short stiff-strawed variety. A new interest was shown when wheat breeders in Washington State released the semi-dwarf variety of winter wheat named Gaines. This variety quickly set new production records in most areas of the State. In 1964 on a 26-acre field under irrigation it produced an average yield of 168 bu. per acre. On summerfallow in the higher rainfall areas, a number of fields averaged between 100 and 132 bu. per acre.

N. C. Stoskopf of the Crop Science

Department, OAC, points out that many diseases found in Ontario seldom occur in Washington. When Gaines was tested in Ontario and the northeastern U.S.A. yields of 30 to 40 bu. were obtained compared to yields of 60 to 70 bu. of Talbot and Genesee in the same test. In every test Gaines was severely infected with mildew and rust. Because of its lack of disease resistance and consequent low yield Gaines is not licensed or recommended in Ontario. ✓

Short-Term Hay Lays Useful

IF YOU ARE in the habit of seeding all your forage land to a bromel-alfalfa or crested wheatgrass-alfalfa mixture, taking off a hay crop for the first few years and then turning the land into permanent pasture, it might pay you to consider seeding some of it to short-term hay lays, according to Dr. Dave Heinrichs, Swift Current Experimental Farm.

In a short-term hay lay you seed such varieties as intermediate wheatgrass, pubescent wheatgrass or slender wheatgrass. These varieties are ideal for this purpose because they produce highly for 3 or 4 years and peter out. What you do then is plow them up and reseed. Do not pasture them. Let your hay fields produce hay and keep your pastures for grazing. You will get more from your land this way because some forage species produce good hay crops but do not graze well. For instance, a Russian wild ryegrass — Rambler alfalfa mixture will provide

excellent grazing over the entire season, but Russian wild rye will not give a good hay crop.

When you are seeding, pick the high-moisture areas of your farm, such as bottom lands, for short-term hay lays and leave the higher land for permanent pasture. ✓

Clean Out Old Grain

NEVER STORE new grain on top of old.

Grain held a year in farm storage is likely to have pests in it, according to Harold Goble, professor of Zoology at the Ontario Agricultural College. He says that if you store the new grain on top of the old its higher moisture content will attract insects from the old crop. If you can't sell or feed the 1964 crop before harvest time get it into other storage.

Before you put new crop grain into the empty bins clean them out in June and repeat the cleaning again in July since some grain will be worked out of the cracks in the floor if any pests are present. Then treat the sides and floors of the bins with malathion, methoxychlor or lindane. Be sure not to use types that will contaminate the grain, such as DDT. ✓

Cheaper Gains with High-Moisture Corn

IF DRYING COSTS are taking the profit out of your cattle feeding operation, try storing corn grain as high-moisture corn. Trials at Western Ontario Agricultural School show

that steers fed high-moisture corn put gains on for 3-4 cents per pound less than steers fed kiln-dried corn. Steers also gained faster on high-moisture corn.

The increase is due to two factors: pre-digestion of the high-moisture corn in the silo and less waste of undigested corn in the manure. In the silage process, carbohydrates in the grain ferment to lactic acid and acetic acid which have a high feed value for cattle. Softer, high-moisture corn also stays in the stomach until it is completely utilized. During the trial, manure from steers fed the kiln-dried product contained four times as much wasted corn as that from steers on high-moisture material.

Further trials indicate that high-moisture corn also compares favorably with the kiln-dried form as feed for dairy cattle, broilers and hogs. ✓

Summerfallow Needs Chemicals

CHEMICAL WEED control, which can replace 1 or 2 summerfallow operations, should be part of your summerfallow program this year according to Earl Johnson, soil specialist with the Saskatchewan Department of Agriculture. He also points out that each operation with a discer reduces the trash cover by ⅓ and suggests that the best method of cultivation will be with a cultivator or blade implement followed by a rod weeder.

There will be about ⅓ less trash cover for summerfallow fields this year compared with 1964. ✓



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Well not quite, because today in industry computers are performing tasks which twenty years ago could only be handled by skilled labour. And farming can, and will be, much the same. For instance, a generation ago it took ten or twenty men to handle a farm that today requires only two or three.

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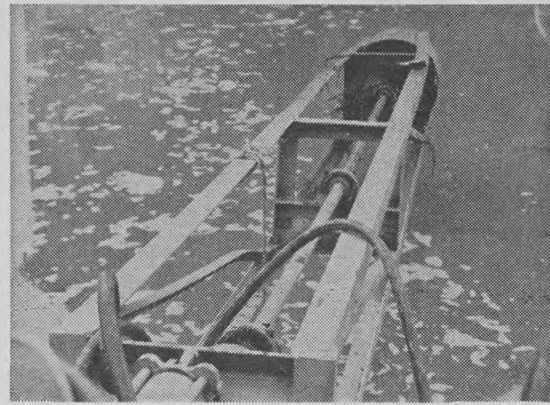
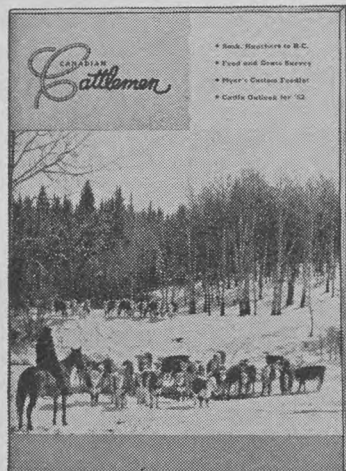
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The agitator is driven from the tractor PTO

[Guide photos]

Combination Agitator and Pump

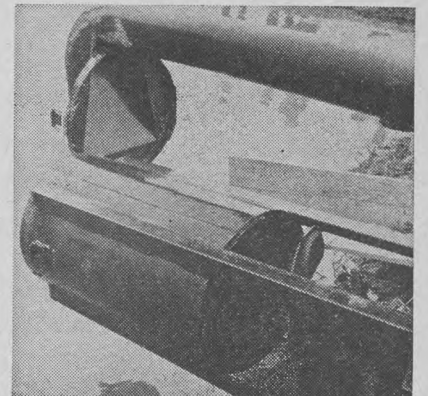
THE RUSH to slatted-floor hog barns has spurred the search for trouble-free and economical methods of handling manure. Two Ontario hog farmers who have been experimenting with several systems have now come up with one of their own. Murray Selves of Fullarton and Malcolm Davidson of Brucefield have designed a combination agitator and pump.

It consists of a tractor-mounted angle-iron frame which can be raised or lowered either hydraulically or by a ratchet jack. A shaft runs back from the power take-off to a 15" auger which operates within a steel casing. This part of the rig is the agitator. Slip a hood and a 6-inch extension pipe over the end of the auger housing and it becomes a pump.

One of the problems plaguing liquid manure handling is the separation of liquids and solids. Agitation is necessary to keep the solids in suspension. If the PTO can only deliver 540 r.p.m., agitation will be necessary quite frequently. With a tractor capable of 1,000 r.p.m., one

agitation daily is adequate while cleaning out the pit. As it is a rather bulky rig, access to the tank is necessary. Murray Selves suggests that farmers should be sure just how they intend to empty their liquid manure tanks before they complete their building plans.

If agitation is done thoroughly it is unlikely that the pump will clog. The pump is able to fill a 1,000-gallon tank in 1½ minutes.—P.L. V



When you slip a hood and an extension pipe over the end of the auger-housing the agitator becomes a pump



At approximately 1,000 r.p.m. solids will remain in suspension for a whole day



This combination agitator-pump has a capacity of 700 gallons per minute

COUNTRY GUIDE



THE NEW CANADA LABOUR (STANDARDS) CODE

Effective July 1, 1965

THE CODE COVERS EMPLOYMENT IN THE FOLLOWING INDUSTRIES:

- RAILWAYS operating beyond any one province
- HIGHWAY TRANSPORT—interprovincial or international
- PIPELINES extending beyond any one province
- TELEGRAPHS and TELEPHONES except those operated wholly within a province
- all RADIO and T.V. BROADCASTING
- all SHIPPING and services connected with shipping
- FERRIES—interprovincial or international
- all AIR TRANSPORT
- all BANKS
- all URANIUM MINING and PROCESSING
- all GRAIN ELEVATORS
- all FLOUR and FEED MILLS, FEED WAREHOUSES and SEED CLEANING MILLS
- PRIMARY FISHING, where the fishermen work for wages
- most FEDERAL CROWN CORPORATIONS

THE CODE SETS THESE STANDARDS:

1. A standard 8-hour day and a 40-hour week, with overtime limited to 8 hours a week and paid at one and a half times the regular rate
2. A minimum hourly rate of pay of \$1.25
3. Two weeks annual vacation with pay
4. Eight general holidays a year with pay

Where it can be shown that the immediate application of the new hours of work would be prejudicial to the interests of employees or detrimental to an industry's operation, the Minister of Labour may postpone the introduction of the hours of work standard to allow time for adjustments.

In industries operating only in a local area, the introduction of the new minimum wage may also be postponed.

For complete information on the new Code, write to the

**Labour Standards Branch,
Department of Labour,
Ottawa.**

DEPARTMENT OF LABOUR

Hon. Allan J. MacEachen, Minister of Labour / George V. Haythorne, Deputy Minister

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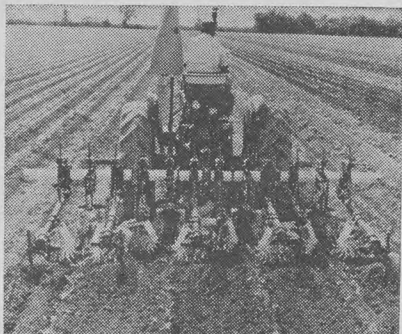
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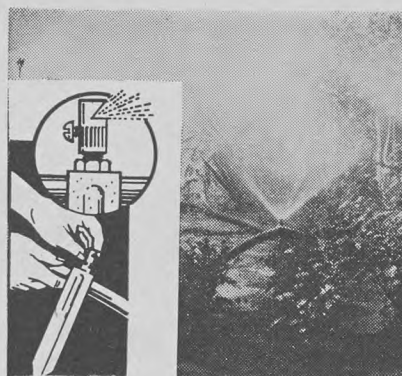
What's New

Rolling Cultivator



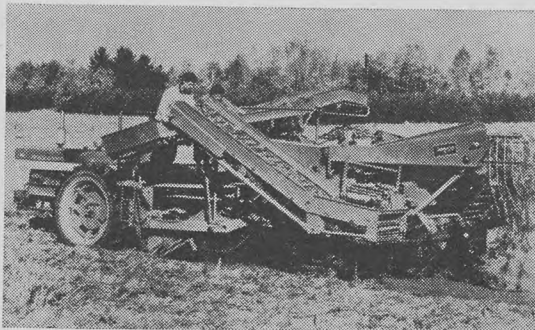
This new rolling cultivator in-
corporates up to six pairs of newly
designed spider wheels. It is said
to mulch, form beds and weed crops
in one operation. Spider gangs are
designed so that they can be angled
to throw soil toward or away from
crop, work the bedded ground or
furrow the sides. (Lilliston-Canada,
Ltd.) (545) ✓

Garden Sprinkler Head



This sprinkler head is designed
for insertion in plastic garden
hose. Galvanized stakes hold sprink-
ler heads upright and keep hose in
desired watering pattern. They per-
mit flexible layout, they are easy to
install and they work with pressures
of 15 to 40 lb. (Horticultural Spe-
cialties) (546) ✓

S.P. Potato Harvester



A design similar to
that of giant earth mov-
ing equipment is said
to give maximum ma-
neuverability without
sacrificing size. The
wheel base is 170
inches. The unit is de-
signed for direct PTO
drive by late model 40
to 70 horsepower
tractors and can be
adapted to tractors
with hydrostatic steering. (F. M. C. Corp., John Bean Division) (547) ✓

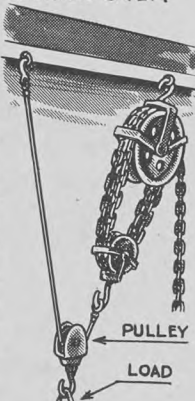
For further information about any item mentioned in "What's New," write
to WHAT'S NEW, Country Guide, 1760 Ellice Ave., Winnipeg 21, Man.

Workshop

Increase Hoist Capacity

To lift a load that is in excess of
the capacity of
your chain hoist,
tie one end of a
rope or cable to
a ceiling beam,
pass the rope
through a single
pulley block and
tie it to the hook
of the chain hoist.
Half the load is
now carried by
the cable or rope
and half by the
chain hoist. —
H.J., Pa. ✓

SPLIT THE LOAD ON
CHAIN HOIST FOR
GREATER SAFETY

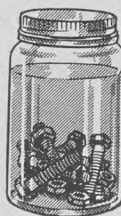


Cleaning Solvents

A reader has pointed out the
hazards of cleaning machine parts
with gasoline, as suggested by the
illustration of an item in this de-
partment in the April issue. Cleaning
solvents are available that are safe
and do a better job of cleaning
machine parts.—Ed. ✓

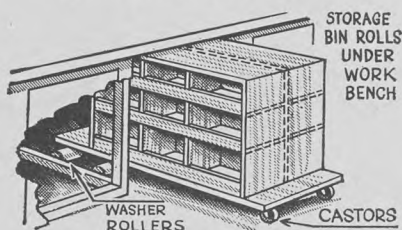
Rust-Free Bolts

Store new nuts and bolts in a jar
filled with clean
light oil to pre-
vent rusting. The
oil will remain
clear if the bolts
are clean when
they are put into
the jar. — J.W.,
Man. ✓

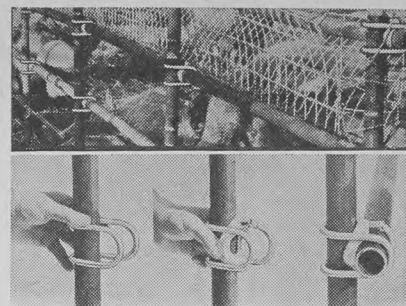


KEEP NUTS
AND BOLTS
RUST-FREE
IN JAR OF
LIGHT OIL

Roll Away Storage Bin



Here is a compact storage bin
made from plywood and the rubber
rollers and caster wheels of a dis-
carded washing machine. It is
easily rolled out for access and rolled
back for storage.—G.H., Alta. ✓



Pipe-Locking Device

This unique new locking device
consists of an open loop, a saddle,
and a single set screw. It permits
easy assembly of temporary or per-
manent pipe structures. (Up-Right
Scaffolds) (548) ✓

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candlelight and salami

by CARTER PRICE

Illustrated by EMILE LALIBERTE

*A love story has the strangest way
of happening; it picks neither time nor
place just so long as there's a guy and a dame*

THIS ONE HAPPENED in my delicatessen, and I'm the guy that's telling it, so that's how it goes.

You run a delicatessen, and all the dishes you handle ain't food! You get to know the dames. The right ones that figure delicatessens are for delicacies; and the wrong one that thinks it's thermidor if you mangle a can of lobster around in some mushroom soup.

Come five o'clock any evening I could make money betting which dames lost at the afternoon bridge table just by what they buy, and the way they sigh, like they think only men is vile enough to need three squares a day. Right then I know their old men aren't going to get no pin-up meal. They're going to eat in an undersized breakfast nook while the wife sits by crooking a pinky above a cup of tea.

So I don't like dames. But you get to allow for exceptions to any statements like that, because there ain't any guy alive that doesn't like some dame somewhere, no matter how tough he sounds telling you they're no good characters.

I got some swell customers. Mostly they're women old enough to know prowling blondes can be scared off fairly easy by three things: good food served regular; a kind of a peaceful place for the old man to come home to, knowing his favorite chair is where it was the night before; and a dame that dishes out an honest smile at the end of the day. These women I go for; and I could give the why-they-do-it boys some information, too. These happier characters I'm talking about weigh around a hundred and forty pounds and they're thirty-five and up, like they passed some hump that let them know you have to make your own rainbows in this life.

Then there are the young wives, kinda like scary kids still guessing whether the guy likes pickled pigs' feet or not. They want to do a good job but their know-how ain't too well developed. These I like to help, especially when they come back some morning and say, "He loved it, Mike. I put the candles in the old bottles you gave me, and I got out the red-and-white checked napkins like you said, and when he looked at me, oh, Mike, it was wonderful."

"Sure," I say, "you go on making it wonderful and it'll stay wonderful. But remember that no candle that

ever burned can make cheap cold cuts look like anything but cheap cold cuts. Did you ever see a quarter's worth of salami by candlelight?"

"Oh, Mike," they say, "what an idea! Have you any other recipes I can try? What'll I dish up for tonight?"

So we go into that, and for a while I forget Sally, the dame who forgot me as soon as she hit the outskirts of Reno. But she didn't make a business of forgetting like I do.

Anyway, my shop is on a nice little street where some architect did a pretty good job of pretending he was making a village. And even if his village is surrounded by city, it fools you into thinking democracy ain't all alphabet soup and housing projects. Tudor, this guy calls his building style. I know that one after he wrote it down for me. It's a red brick and clean plaster with some of the timbers showing, and there's enough space in front for some fair-sized trees.

JUST ACROSS the street from my shop, and down a little, there was two vacant stores. One was kinda big and the other not so much of a place unless you were planning on collecting stamps or tying flies. Anyway, news got around, like news always does, that the big store had been rented to a guy that was going to operate a beauty shop.

I keep a watch on the store, waiting for them to doll it up with orchid paint, and the only sign I see is a kind of a small board swinging from a metal arm. This sign says "Jerry Denton" in good clean letters. Just that. I feel sorry for the guy. No dame is going to figure a Jerry Denton can fancy up her hair like someone named Pierre. I think he's busted before he opens the joint.

The morning he opens I watch some more. Sure, part of it's because I want to see if his customers are going to louse up the parking situation. The rest of it is because I'm afraid this Joe has put his money into a wrong deal.

First I see two cars roll up, relieve themselves of some dames that aren't bad, and roll away again. They got hackies driving them. Then I see a young guy come out of the shop, talking to somebody in another car. She gets out and goes into the shop and this kid drives the car away. And that's how it goes. The



cars of Denton's customers keep on this shuttle-service deal never dreamed up by guys named Pierre. And I don't need no counting machine to figure out that Denton's first day in the beauty business is pretty good.

I keep my store open until around eight, but at seven o'clock there's a lull sometimes. So that's when I get out my special blend of coffee, grind it through the hand mill, and begin brewing it up the slow way. When I drink coffee I wanta know it's coffee, not just the label dipped in boiling water.

Anyway, I'm just coming back to the front of the store when a customer steps in. He's about six-feet-two, with sandy hair, a pair of clean blue eyes, good teeth and a healthy tan. He's got on a tweed suit that can afford to look careless because it's got enough chips back of it to know it ain't, a bow tie that looks good on the guy, and some of them loud plaid socks. Offhand I'd bet he was a good stroke on a varsity crew.

"Hi neighbor," he says. "I'm Jerry Denton from across the street," and he held out his hand.

"The same is Mike Vanzini," I tell him.

He don't shake hands like any Nancy-pants hairdresser.

"I hear you know something about food," he goes on. "Have you got anything I could jump into right now? I've got so much cash over there I can't think it's honest. I want to go back and check it over, but I think cash is bad on an empty stomach." Then he begins to sniff. "Mike," he says, rubbing his hands together, "don't tell me that's coffee."

What would you do? "Sure it's coffee," I tell him. "Come on back."

I got a couple of chairs in the back and an old table; and I get out some cold roast beef, rare, some good chutney, a rye loaf, and the coffee.

Jerry stand; there, easy like, smoking a cigarette as he's watching me.

"How come the delicatessen, Mike?" he says, kind of curious.

I take a look at this Denton guy and figure he can blot up an honest statement without telling you to change inks and it might look different.

"Because I hate dames," I tell him.

He didn't take it exactly like I expected him to. He laughed. He laughed like a guy that's heard a story to end all stories; and he walks over to shack me on the back and laugh some more.

"Et two brewtay," he keeps saying, and I tell him I don't get it, and he says all it means is "You too, Mike?"

IT'S BEEN quite a spell since I've seen a guy I'd open up to. I mean, I'm kinda leery of spilling too much sob-stuff about this Sally trick. But I look at him again and I get a couple of bottles of beer. He's a right guy.

I can't tell it his way, but what he tells me is about a dame named Sandra. He'd known her since they were little kids, and he was strictly hers. It never occurs to him to figure out they won't live happily ever after, because as far as he's concerned, that's all they been born

for. He shows me a snapshot of her. Kind of sultry blonde, but pretty. And class. Definitely class, just like Jerry. So he buys her an emerald cut and they get engaged just before he ships out to Korea.

Jerry has one idea only; to get it over with and get back to Sandra. He takes a slug that won't make him no candidate for easy looking at in a shrunken bathing suit, and he lands in hospital, where he stays for a long session.

He's still there when he hears this Sandra doll has double-aisled it with one of the play-it-safe boys. She's sensitive, this Sandra explains to some friend. She couldn't bear to think of dear old Jerry being banged up like that. She was afraid she'd show it.

So eventually Jerry gets out of the hospital. But he don't feel much like fighting. To be a lawyer you gotta fight, he says, and he's lost his taste for it. So he tried to figure out what he can do to make a living without getting stomach ulcers doing it.

After he does some investigating, he sees that a number of guys have discovered beauty's where the gravy is. Jerry says he's still pretty burned up about the Sandra deal, and he figures a joke on any dame is a joke on Sandra, and when you can escape through a joke you've learned the first lesson of how not to die of heart disease at the age of fifty. So he latches on to one of these courses, and finds himself pretty sharp at matching hair styles to facial bone structure. Quote. That's what he says, and I take his word for it.

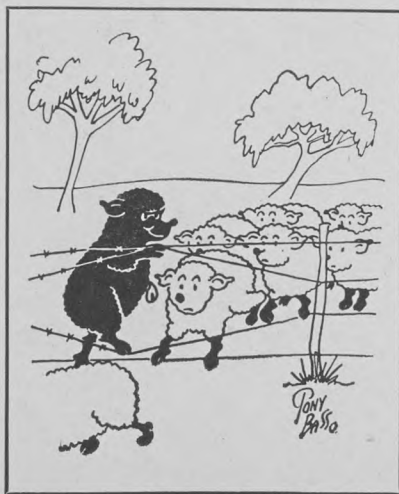
Then after he gets a bit of experience in one of them up-town salons, he opens his own place. The kid he's got on the car shuttle service is a cousin. The boy's got no complaints about life or dames. He's just got some kind of paper he's gotta write to get some higher education, and he seems to think Jerry's place gives out with the information.

About ten o'clock we've finished everything on the table and I watch to see if Jerry is punk enough to offer to pay me for it. But he isn't. Instead, he just laughs and says:

"I haven't got much to offer you across the street, Mike, unless you want an oil shampoo; but I know a place down the line that makes wonderful fish chowder and has good, dark beer. Some night let's close shop and wheel that way together."

"Vardi's?" I ask him.

And he says yes, Vardi's; so I know he knows good food.



"Why don't you come over to the shop with me and help me count the cash?" he says.

So we go over to his place, and I think I'm seeing wrong.

The front part has got nice pine wood all over the walls, and good green leather chairs. The hair wash-basins don't look like fugitives from no hospital. They're all dark green, and when they're not in use they're covered up with more of this pine wood.

"Don't look so surprised, Mike," Jerry tells me. "It's what you call psychology. Women look more feminine against this kind of background. It flatters them. I took a page from their own book. I play hard to get; and then I get it my own way."

"Boy," I said, "I betcha they pay."

"Boy, I betcha they do," Jerry says. "We count up the cash."

"Does it compare with the delicatessen take?" Jerry asks me.

"It looks better," I report, "but I don't know about your overhead. Mine's low."

We lock up his place and I walk to the parking lot with him. The wind is doing a tenor solo through the elm trees and the stars are thicker than tapioca. After Jerry drives off I feel kind of lonesome, thinking about dames and how they bust guys up.

ABOUT A WEEK LATER, early evening time, someone new started showing up at the delicatessen. She wasn't a kid. I guessed her at twenty-six, twenty-seven. In there somewhere. Kind of a nice age, but she didn't seem to think so. She seemed to have forgotten how easy it is to smile. She bought good things, but only enough for one. She told me so, like she thought I'd make something of it. Something unpleasant. By the time I had her tagged as a regular from one of the apartments and begun suggesting things to give her suppers a little more of the old pepper, I notice how she'd stand there, looking at Denton's shop.

Don't jump the gun. This isn't the Sandra babe. This one has wavy black hair and big gray eyes, and she's taller than Jerry's piece of heartbreak. And her name is Elsa. Elsa Blom. I know because I'd cashed a cheque for her. You find out a lot of things in a delicatessen. I'd found this Blom chick is plenty smart. The cheque I cashed was a pay cheque. And it wasn't peanuts, not for one week's work.

Then, one evening, watching Jerry's shop, she says, "That impossible man."

"Who?" I asks her.

"That Mr. Denton." And she looks pretty with her eyes as mad as that. "What red-blooded man would settle for being a hair stylist?"

"Listen, sister," I tell her. "I don't know about how good a hair styler he is, but I can tell you he's a red-blooded man." I give the cash register a good poke and say, "A dollar sixty-nine," which is one way of telling her I don't care whether she buys anything more or not.

She looks at me like something that's thinking of pasting you one, and then she smiles.

"The name is Blom, not sister," she says. "Mike, how do you make coffee that smells like that?"

"Want some?" I ask her.

She nodded her head. Her nose looks cute all crinkled up like it's smelling the best perfume in the world.

"Take it back?" I say.

"About Mr. Denton?" Her nose isn't crinkled now. "Why do you hate women, Mike?" she says.

"Why do you hate a guy you don't even know?" I ask her. "Or do you know him?"

"No, I don't," Elsa says. "But did it ever occur to you that there are women who hate men, too? And for good reasons."

I took her back and poured out a cup of coffee for her. And when there was a lull I went back and poured some for myself.

"It's the best coffee I ever tasted," Elsa says. "How do you do it?"

"By not trying to have time I wouldn't know how to spend anyway," I explain, and then Jerry comes in.

"Mike," he yells from the front of the store. "This is our night to go to Vardi's." By the time he finishes saying this, he's in the back of the store and staring at Elsa.

"Miss Blom," I say, remembering that's the way it should be done. "Miss Blom, meet Mr. Jerry Denton." I even bow a little, with one hand on the white apron across my stomach.

"Is there any coffee left, or is this ladies' night?" Jerry asks me, after they'd said something to each other like "Pleased to meetcha," whether they were or not.

"It's delicious, isn't it?" Elsa says. Her coffee is finished and she stands up looking at Jerry and me. "Thank you, Mike." She waits a minute and then says, "It's never really ladies' night for you or Mr. Denton, is it?" And it sounds like taffy laced with arsenic.

Jerry watches her leave, and sits there in a kind of a dreamy mood.

"Mike, I think we've overlooked something. Second aid could be pretty good if one hadn't spent a lifetime believing first aid's better."

I shrugged. I didn't know what he was talking about.

"Who is she?" he asked.

That I understood. So I tell him the little I know, including the fact that he's an impossible man.

Jerry just laughed, and we drove out to Vardi's and had a good evening.

"Dames ain't people," I tell him, working on a dish of Vardi's chowder.

"Maybe we're wrong," Jerry tells me, kind of sighing. "Miss Blom looks like people to me. Nice people."

But two days later Jerry came over at noon to tell me he might have been mistaken about the Blom dame. She's leased the little shop next to his. He'd had some kind of a first-chance deal on it, but he didn't want to go for the lease until he's settled good in his own shop. The Blom chick beat him to it. She has the lease and is going to put in a bookshop.

She came in that evening, all aglow.

"Mike," she says, "you can call me neighbor. I have the little store

across the street. I'm going to have a bookshop. Congratulate me, Mike."

"Did you have to cut Denton's throat to do it?" I ask her. "Weren't there any shops but that one?"

She didn't look glowing now, and I felt kind of sorry.

"Did you ever hear of competition, Mike?" she asks me.

"Yeah," I say, kind of tired like, "I've heard of competition. Business and otherwise. I even lost out to some competition that had a snappy convertible and more cash."

Elsa is quiet for a minute, and then she says, in that nice, low voice of hers, "I lost out to the boss's daughter."

I look at her for a minute, and then it comes clear. "So you're one of the ones that got taken for a ride," I say.

"Yes," she tells me. "I'm one of them. I waited and worked and saved. And dreamed. It's the dreaming part that makes the biggest fool of you."

"Let's have some coffee," I say. "It's the best I can do."

But just then we look across the street and see Jerry getting in a car with a dame. And what a dame. Sheer class. She's at the wheel, but he just laughs and pushes her over.

"Looks like Jerry's found some second aid," I say. The Blom doesn't get it. She's forgotten how to smile again. Then she says, "Too bad he had to look for it so far beyond his own age bracket."

And we don't have any coffee, because Elsa slams out like she's mad.

THE NEXT DAY I ask Jerry who's the dame I seen him with last night, and he says, "That's no dame, that's my mother," but he doesn't smile like someone making a bum joke. He pulls himself kinda proud like, and he says, "My own mother died when I was born, Mike, and my father waited a long time before he married again. He did it when I was twelve. He thought both of us would be better off with someone to supply a gentle touch. Linda was the gentle touch."

He stops at that point and I wonder where we go from there. Then he says, "My father was a reservist and was killed in Korea, Mike. So I was the only one left to come home to Linda. I thought she might be bitter about it; and I made it tough for her, staying away, and not telling her what I was going to do. I thought she might be looking for an excuse to toss me off the home lot for good and all. But some dames can be people, Mike. Linda is people, and don't you ever forget it. She's never told me, but where do you think I got that introduction to the carriage trade?"

"Through her?" I ask him.

He nods his head. "What my dad's son, Jerry, decided to do is going to be a success if Linda has anything to say about it. That's the sort of loyalty you and I got cheated out of, Mike. It's the kind of loyalty I think the Blom dame has."

"You were right," I said, and tell him about Elsa's guy.

Elsa came by later, and I said, "That's no dame. That's his mother."

She didn't get it for a minute, and when she did her cheeks got a little pink. "He's lucky, isn't he?" she says.

"So are you," I say, thinking how Jerry's brushing old memories off his heart, but she doesn't know what I'm talking about. "When are you going to open your shop?" I ask her.

"Pretty soon now," she says. "I need a little more money."

"Come on back and have some coffee while you tell me about it."

This is a plan. Jerry will be over for coffee, too. And then we're going to Vardi's again. Jerry and I get along fine.

So we're having coffee when Jerry comes in.

He lights Elsa's cigarette and I see her hand shaking a little.

"You might like me if you tried," Jerry says, easy like.

"Maybe I'd rather not try," she tells me, also over-easy.

"But we're going to be business neighbors. It would be more fun if we were friends. Everybody likes Mike. That's why it's such a nice block to work in."

"I'll just work," she says. "I'll just work — and like Mike."

Jerry watches her for a while, like he was making up his mind about something. Then he says, "I'll play a little game of poker with you, Miss Blom," and gets out his wallet, pulls out the picture of the Sandra babe, tears it in half, and puts the two pieces in front of Elsa.

"That's what I thought I was fighting my piece of the war for," he says.

Elsa looks at him. Long and steady and hard, like she was making up her mind about something, too. Then she opens her purse, takes a picture from it, tears it in half, and lays the two pieces down in front of Jerry.

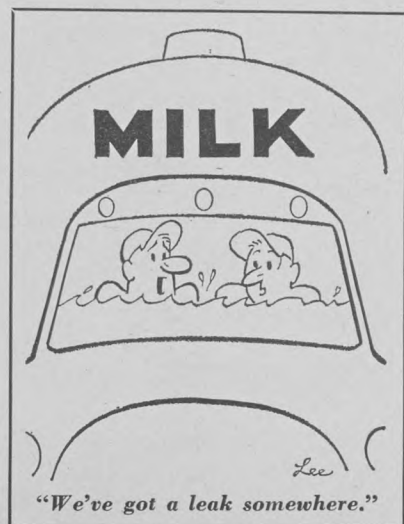
"That's what I thought was worth building my future on," she says.

Maybe you have to be class to do it like that, but it looked like a smart idea. I pull out my own wallet, take out the picture of Sally, tear it in half, and put the two pieces down in front of myself.

"That's that," I said. "Period."

LATER WE DROVE out to Vardi's. Elsa could sing, and she knew a lot of songs. We figured radio might be missing something without us. Anyway, it was fun.

Over the fish chowder, Elsa began to talk about her shop; and



Jerry began to talk about his shop, and I began to talk louder than the two of them.

It seems like Elsa thought there could be a door cut through from her shop to his, and she could send in a little pushcart carrying the latest books. This would give Jerry's customers highbrow service and boost her rentals. Jerry said fine, but her rates would have to be high. His business had caught on and the high-priced, hard-to-get services paid off.

My idea was about food, of course. First, my coffee, which is the best anyone has ever tasted, then fruit juices, vegetable juices, tasty snacks, and so forth, to make the dames feel so at home they don't know how they can live without Mike, and Jerry and Elsa. We use neat little trays like they have on planes, I say, and guarantee no crumbs.

Jerry employed a cute little neighborhood girl. To pretty up the place, he said, as well as wait on the customers. Now Jerry tells us this girl can man the bookcart and take snack orders.

Boy, if you think that night at Vardi's wasn't profitable you don't know a race track when you see one. We got the first three-way deal going so good it even hit the keyhole columns. My name's there, too, on accounta the food I lug out for parties given by some of the dames that come to Jerry's shop.

By the time we open the second deal that cousin of Jerry's figures he's got enough higher education to take care of the books. Jerry buys the Blom a big ring, and I get a snappy convertible. It done my soul a lot of good.

Six months later, we opened up the fourth beauty-brains-and-the-beast combinations, as Jerry calls them. And are we making money!

That takes care of most of the story, but it ain't the best part. The best part happened a couple of weeks ago at what Jerry calls the home lot, which is a ten-acre spread. There they christened Linda Michelle Denton, Elsa and Jerry's first baby. The Michelle is from Michael, just for me. I'm the baby's godfather, and I never been so proud in my life.

I was so proud I got up nerve to ask Jerry's mother a question. "How come you don't marry again?" I ask her. "You're a swell looking dame and you ain't so old."

I guess having the nerve to ask her kind of knocked her for a loop, for a while I wondered if she was going to answer me. Then she put her hand on my arm, friendly like, and she says:

"Mike, there are women who love once, and that's all. For a lifetime they can go on loving, no matter what happens. I'm a woman like that." And then she smiles at me. "Do you know something, Mike?"

"What?" I ask her.

"There are men like that, too. I'm afraid maybe you're one of them."

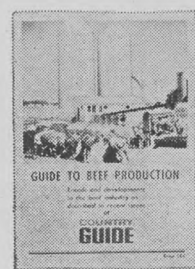
Dames is people, all right. Linda and Elsa showed me how it works. And the four of us is going to see that baby Linda is people, too.

Linda Denton's husband ain't never going to know what candlelight looks like on a quarter's worth of salami.

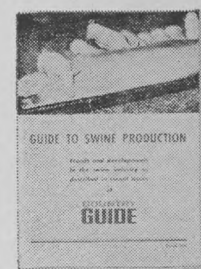
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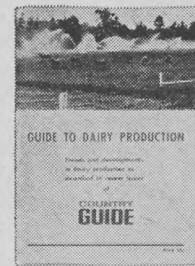
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Let's Think It Over

by THE VERY REV. M. L. GOODMAN



Watch for Falling Rocks

Each summer we do a little mountain climbing. There are no guides, no ropes, no axes — and no serious danger; but we like to think of ourselves as mountaineers just the same. About four miles from the old cottage there's a cleft in the rock where we can climb several hundred feet to the top of the great cliff which dominates Thunder Bay. First we pass through thick trees and underbrush and then there's a steep part where we must scramble over and around huge tumbled rocks. It gets still steeper and presently we're in the trees again (not to mention a great patch of poison ivy which must be avoided). Finally we're ready for the last bit — up the narrow cleft, real hard going on hands and knees. The only danger is here — because a lot of loose rock. The rule is "remember the fellow below — don't roll a boulder on him."

That's a good rule not only for mountain climbing — but for life. Our actions not only concern us, they also have consequences in the lives of others.

Morning's the time to stop for thought and prayer. It cannot be thought and prayer just for ourselves. There are all those others whom we will meet during the day. "Remember the fellow below — don't roll a boulder on him." You may go safely yourself, but that's not enough. There are all those others to be considered. There's no real triumph and no happiness in reaching the top of the hill, if others have suffered from our carelessness along the way.

Suggested Scripture: St. Mark XII, 28-34.

Love Set Free

"I come to bury Caesar not to praise him." These words from Shakespeare's play are familiar to every school boy.

With this statement Antony begins his clever speech by which he stirs up the people to avenge the death of Caesar. Antony uses every trick to arouse the emotions of the crowd, and, having succeeded, he watches them rush off to attack Caesar's murderers. As he watches he says, "Now let it work — mischief is afoot."

May we not believe that something like this was in the mind of God on the first Easter Day? "Now let it work. Love has risen from the dead, and is set free among men. Now let it work."

Here's a checklist
for homemakers who may be

Furnishing a Kitchen

IF YOU ARE furnishing a brand new kitchen or replacing worn-out kitchen utensils, it's a good idea to ask yourself a few questions about what you want in cookware. For example, in choosing a basic material, ask yourself these questions: Is it a good heat conductor? Is it easy to keep clean? Can it be brought to the table when you entertain? And will it keep its gleaming good looks without breaking, chipping, denting, pitting, rusting or darkening?

Stainless steel requires about the least upkeep of any common kitchen metal. It's easy to clean with suds-and-water treatment, needs no polishing. It resists denting and pitting, is durable and sanitary. Stainless utensils often have copper-clad or aluminum-clad bottoms to furnish the even heat needed for top-of-the-range cooking.

Copper is the best heat conductor of all metals. However, copper utensils must be lined to prevent corrosion, and the outside surfaces of copperware require special care to keep them bright and shiny.

Aluminum is lightweight and second to copper in conducting heat. However, aluminum does tend to pit and discolor during use and requires additional work to keep it bright.

Cast iron is durable, heats evenly and holds heat well. It is heavy and porous and will rust if not cared for properly.

Glass cookware is available for both top-of-the-range and oven cooking. Glass absorbs and holds heat well but it will break if carelessly handled.

Non-stick coatings are applied to various materials and are handy for easy clean-up in certain kinds of cookware (such as casseroles). However, some foods, such as cakes, actually stick more to these coated utensils. Special care must be taken not to scratch the surface, and all such coatings will wear out in time.

Whatever kind of cookware you favor here's a checklist for a well-equipped kitchen:

Saucepan (1-quart): for vegetables, soups, sauces, hot cereals, puddings.

It did work. It worked first in the Apostles' hearts, changing them from frightened, faithless men to resolute soldiers of God.

It worked in the hearts of the Jerusalem crowd that day of Pentecost when the Apostles first preached in the streets. Three thousand from the crowd believed and were baptised. Love was afoot — changing lives, beginning to change the world.

Within a generation men were saying of the Christians, "These that have turned the world upside down are come hither also."

From day to day, especially in critical times such as our own, it is absolutely essential that we look again and again at the *power of the love of God* which is in Christ Jesus. It is all too easy to become depressed and pessimistic. The power of God's love is *not less* now than it was then. No man can be cut off from it. It is still afoot — it still works.

Suggested Scripture: Acts II.

Make Friends with God--Now

One of the favorite chapters of the Bible for youth services is the one which begins, "Remember now thy Creator in the days of thy youth." However, from that point on the chapter becomes almost unintelligible for most people. Actually the writer (Ecclesiastes — the "teacher", or "preacher") is drawing a rather gloomy picture of old age. His message is that we are well advised to think of God while we're young, before we become afflicted with the miseries of old age. "Remember now thy Creator in the days of thy youth, while the evil days come not, nor the years draw nigh, when thou shalt say, I have no pleasure in them." A little explanation makes the remainder of the message quite clear:

the keepers of the house — the hands
the strong men shall bow themselves — the legs
the grinders — the teeth
those that look out of the windows — the eyes
the doors shall be shut in the streets — deafness
the daughters of music — the vocal cords
almond tree — gray hair
grasshopper shall be a burden — any little thing will seem troublesome
silver cord — the spinal cord
golden bowl — the skull

"The pitcher broken at the fountain, the wheel broken at the cistern" — refers to the breakdown of certain internal organs.

The writer of Ecclesiastes has been trying to discover what makes life worth-while. This is his last chapter where he sums up his findings — "Fear God and keep his commandments for this is the whole duty of man."

Suggested Scripture: Ecclesiastes XII.

Saucepan (2-quart): for same foods as above but in larger amounts.

Saucepan (3-quart): for deep fat cooking; meats cooked in liquids, stews, small pot roast.

Double boiler inset (2 or 3 quarts): for foods not cooked over direct heat, such as cake icings, sauces, melted cheese dishes.

Frying pan (8-inch): for eggs, bacon, sausage, hamburger (egg poacher inset optional).

Dutch oven (5-8 quarts): for pot roasts, stews, spaghetti, large quantity of any food.

Pressure cooker: for pot roasts, stews, some vegetables, and home-made soups — anything which otherwise requires long cooking time.

Roasting pan and rack: for large and small roasts and poultry.

Kitchen tool set: for serving, stirring, turning foods. Usual set includes spoon, fork, potato masher, pancake turner, soup and gravy ladle.

Kitchen knives (basic five): utility knife, paring knife, narrow slicer, chef's knife, serrated knife.

Measuring spoons: ¼ teaspoon, ½ teaspoon, teaspoon, tablespoon.

Measuring cups: ¼ cup, ½ cup, ¾ cup, 1 cup — glass for liquids; metal for dry measure.

Mixing bowls: for cake or cookie batter, stuffing, any mixing needs.

Colander: for draining spaghetti, noodles, rice, salad greens.

Multi-sided grater: for grating cheese, onions, lemon peel, cabbage for cole slaw.

Meat and candy thermometers.

Covered casserole dish: for macaroni and cheese, all casserole dishes, meat loaf; doubles as vegetable serving dish.

Baking or cookie sheet: for cookies, biscuits, rolls.

Pie, cake and muffin pans.

Tea kettle.

Coffeemaker 4-cup (electric or top-of-stove): for daily use (1 or 2 coffee drinkers).

Coffeemaker 12-cup (electric): for larger amounts or when company is expected.

Toaster.

Can opener.

Not essential, but extremely useful are:

Electric fry pan

Rotisserie (conventional or open smokeless)

Mixer

Electric knife sharpener

Waffle iron

Blender

Food chopper



This is Betty Lindsay of Grosse Isle, Man. Betty tumbled down the stairway of her farm home and broke her left arm. Two casts and an operation convinced her of the need to follow basic safety rules, one of which she was breaking when she tumbled

When Mother Has an Accident

by ELVA FLETCHER

GROSSE ISLE IS a Manitoba community of some 60 families. Although it is only 20 miles northwest of Winnipeg it still has a lot of the traditional community activity and spirit and, as in most such districts, individual families find themselves leading increasingly busy lives. The Lindsays are no exception.

Betty and Charlie Lindsay farm 320 acres, all of it in cereal crops. And they supplement their farm income by operating a school bus and caretaking the community's 3-room elementary school.

The Lindsays like to feel they are doing their part to better their community. Charlie is a steward in his church; Betty teaches a Sunday School class. Both of them belong to the community recreation club and take their turn with other families in providing the lunch that is served following the monthly club dances. Betty is a one-time president of the local Women's Institute; now she is its treasurer. In summer both of them coach baseball teams. In winter they curl.

The two children — 10-year-old Sharon and Jim, 8 — are as sports-minded as their parents. Both take Red Cross swimming lessons. Jim plays in the PeeWee hockey league. Both youngsters sing in the church choir and Sharon takes piano lessons.

With all this activity, "life gets pretty hectic at times," Betty says.

Last fall she had an accident.

As a result the Lindsays' entire life changed because from the time Betty got up in the morning until she turned in at night she was dependent on family and friends.

"Did you ever try to butter a piece of bread, curl your daughter's hair, dry dishes or peel potatoes with one hand?" she asks.

November 17, 1964, started out like many other days. Betty had decided on a day's baking spree for the recreation club's bake sale. She baked all day. When it was time to take the

school bus, she went upstairs to change her clothes. That done, she started toward the stairs. As she passed the door to Jim's bedroom she noticed a glass tumbler on his dresser. She picked it up, walked back across the hall and started downstairs.

"At this point I must have slipped and fallen forward. I tried to grab the bannister but I was off-balance and fell head first down the remaining 10 or 11 steps to the hallway below, landing on my forehead with my arm doubled in underneath me. The tumbler smashed, of course, but luckily I had only a slight cut on my head. I didn't have another mark or bruise on my body."

THE WORST MOMENT of all came when Betty picked herself up and realized that she'd broken her arm. After a minute or two she managed to get up and walk to the phone but, at that point, she had some difficulty holding her arm and using the telephone at the same time.

An examination showed a bad break in the lower humerus of her left arm. She wore a cast for 6 weeks. When her arm didn't heal properly she wore a body cast for another 6 weeks. That didn't work either. Exactly 4 months after her fall her doctor operated and completed a fusion using a steel pin.

Betty Lindsay was handicapped. But so was her family. Charlie had to drive the bus and look after the school. "We managed the washing," she says, "and my neighbors did all the ironing. They'd come and pick it up and bring it back. And in all those weeks we were never without home baking. I'll never forget how kind people were.

"You can ask me what caused me to fall. I really don't know," she says. "But I do know that I was doing something I caution the children about. I was in my stocking feet. Now, as I think about it, the more I'm convinced that most of us are going so fast we really don't think about what we are doing. Look at the accidents with farm machinery. Look at my scar."

Home and Family

That scar is one reason why Betty is particularly careful about the hallway and stairway in her home. This means the stairs are well lit, they aren't used for storage space, that there aren't any unanchored rugs at the bottom of the stairs and that they aren't slippery.

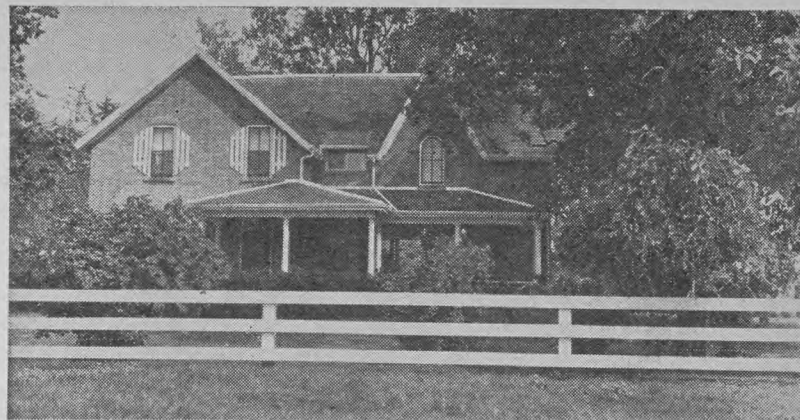
How can children be taught to observe safety rules around home? Betty has some very definite ideas on this. "Remind them often and remind them persistently," she says. "Furthermore, punish them when they disobey."

She knows that the accident might have been worse. "When I'd get depressed because the break was mending so slowly and I could do so little I could at least be grateful that I had the use of my right hand and arm. And the community spirit in our district took on an even deeper meaning for me and my family."

Meantime things are almost back to normal in the Lindsay home. Betty is back driving the bus again, and she's doing her own baking and ironing. But she's doing one thing more: she's promoting the farm safety drive being observed in the prairie provinces from July 25 to July 31. V



Dorothy enjoys features such as the built-in oven in her compact U-shaped kitchen. Black hardware accents knotty pine cupboards. Window faces yard



The Wilsons made only minor changes to exterior, replacing bay windows on ground floor and building a dormer above new bathroom window

90 Years Young

by GWEN LESLIE

Home Editor



The family hangs outdoor clothing in closets on one storage wall of kitchen-turned office



Divider between family room and eating area serves as couch end too. Jeff and Jill store treasures in the deep drawers in built-in couch

JOHN AND DOROTHY WILSON are the third generation to raise their family in the big 2-storey farm house built 90 years ago by John's grandfather. If you were to visit their home, I think you'd agree that it's best described as 90 years young. Through carefully planned remodeling the Wilsons have redesigned their ground floor rooms for modern family living.

Like many well-built houses of its time, the original brick structure was sturdy and sound. The rooms had high ceilings by today's standards. The walls of the overly large dining room were cut up with 5 doorways. An arch separated the double parlor. The kitchen had been done over some years ago, but it was a big room requiring many steps. And it was some distance from the pantry. The pantry and two sets of stairs, up and down, were off the dining room.

Today, that kitchen is the farm office. A shower room off it is handy to the back door entrance.

The Wilsons transformed the large, old-fashioned dining room into a family activity room, and the stairwell and pantry area are now a compact U-shaped kitchen and adjacent eating area. Ceilings were lowered 18 inches throughout the kitchen, eating area and family room and finished in the same brown-on-white acoustic tile. The floor surface is the same through the three areas too — a vinyl floor covering in beige, brown, gold and white whose ease of care is most popular with Mrs. Wilson.

The light ceiling and floor areas are bright accents to the warm wood tones the Wilsons selected for the walls. Kitchen and eating area are finished in knotty pine; the family room walls and built-in couch are of random-groove mahogany paneling. The couch is her husband's favorite piece of furniture, Mrs. Wilson told me laughingly. "And that's probably because, as he says, it's the one piece I can't move," she added. "He always knows he'll find it in its place."

Ten-year-old Jill and Jeffrey, 7, like another feature built into the couch; each has a large drawer for toy storage beneath the cushioned top. The cushions, covered in wipe-clean vinyl to match an easy chair and footstool, are prevented from slipping out of place by an under-matting of rubber.

Three drawers were built into the end of the divider between family room and eating area; one each for Mrs. Wilson, Jill and Jeff. "We truly live in the family room, and it's grand to

have things handy yet out of sight," Mrs. Wilson said.

With the new family room, the Wilsons felt one-half of the old double living room was enough. They chose to retain the half nearest the family room and close in the connecting arch, adding shelving in the indent left on the living room wall. The second half of the old living room they turned into an attractive ground floor master bedroom. Birch wall paneling is matched with louvered doors on two double closets set side by side on one wall. By day the room is softly sunlit through a new picture window installed to replace a bay window. By night, cove lighting tucked away under the full length of the wall-to-wall valance takes over.

"If the children run off on us," Mrs. Wilson says with a smile, "John and I could live quite comfortably on one floor." Meanwhile, through remodeling, the Wilsons have created a convenient setting for family activities.

Dorothy had an interest in the reorganizing of the farm office as well as the living area in their home. She does the accounts for their diversified farm operation. John runs sheep, pigs, a dairy herd, beef cattle, and grows cash crops on 750 acres in one of Canada's most progressive farming areas, Kent County, Ont. With the accounting, her family, and her own varied interests, Dorothy had cause to be relieved when the remodeling was completed. Even so, she says, "I think it's a challenge to fix over an older house and see what you can do with it." V



Both Jill and her mother take organ lessons. Mirror frame was "borrowed" from a picture

Serve a Salad

by GWEN LESLIE
Food Editor

THIRTY YEARS ago, a handful of people launched the first salad week promotion in Manitoba. They chose a week in July when locally grown produce was generally available. Today the entire month of July is devoted to an industry-wide salad promotion. Growers, wholesalers, retailers and representatives from government and food companies serve on committees in centers across Canada. Nutritionists and home economists working with consumers take an active interest in the promotion too; Canadian health is their concern. Families eat more fresh fruits and vegetables as they discover the taste treat in a salad that's as good to eat as it is good for them.

An artfully prepared salad pleases the eye, first of all. Garnishes add the finishing touch to this eye appeal. Design the garnish as an accent in color and texture to the salad as a whole. Keep it simple—and edible. A large salad plate or bowl can carry a large garnish; for an individual serving, the garnish should be an easy-to-eat size.

Here are some suggestions for garnishing your salads this season. Remember to put cut, raw vegetables in ice water to crisp.

- Small red bell pepper or tomato cut in tulip shape.
- Thinly sliced turnip rolled into a calla lily with strips of green onion as center.
- Carrot slices notched in the shape of a flower petal, with a slice of olive as the center.
- Carrot curls, strips, and fans.
- Thin rings of sweet red or white onions; red or green bell peppers.
- Thinly sliced radish circles

arranged in a flower shape, with or without thin slices of cucumber.

- Whole radishes with the top cut lengthwise and crosswise to make a pom pom.
- Whole long red or white radishes cut almost down to the stem end to form several strips. Spread the strips gently. (This cut can also be used on small pickles.)
- Skewers of small cooked onions and raw cherry tomatoes separated with a slice of cucumber.
- Fresh mushrooms cut in lengthwise slices.
- Crisp cooked or tender raw tips and diagonal cuts of asparagus stalks.

To trim a green salad, you might use one of the following: raw broccoli and cauliflower florets; cherry tomatoes hollowed out and filled with a meat spread; tops of green onions, bulb removed, slit lengthwise into fine strips called jade trees.

Pickled vegetables; twists of cucumber, lemon or lime; grated or sliced hard-cooked eggs with pimiento; croutons; Chinese noodles; toasted sesame seeds; small flavored crackers; thin strips of luncheon meat, chicken, turkey, or cheese.

Cornucopias of thinly sliced ham, chicken or turkey; crumbled fried bacon; circles of cooked frankfurters; small circles of bread topped with melted cheese; stuffed olives; tiny shrimp, parsley, watercress and dill.

And for the salad itself, serve vegetable salads crisp and cold. Choose a dressing that complements the flavor of the meat or main dish. For instance, with a main course which includes a rich cheese sauce, serve a salad dressing that's light and sharp in flavor and free of cheese! On the other hand, a mild-



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[Glen Robinson photo]
Manitoba Minister of Agriculture Hon. George Hutton, 1965 Salad Queen Noreen Lamb and Ken Todd, chairman, Man. Potato Marketing Commission, admire salad display presented as part of industry-wide Salad Month promotion

flavored meat such as chicken would be overpowered by a salad dressing heavy with garlic. Generally speaking, a salad dressing is better tart than sweet.

Tangy Spinach Salad

- ½ lb. untrimmed spinach
- 2 T. minced onion
- 2 tsp. snipped parsley
- ½ tsp. thyme
- 5 bacon slices, diced
- ¼ c. vinegar
- 1 tsp. dry mustard
- ⅛ tsp. garlic salt
- 1½ tsp. sugar
- ¼ tsp. salt
- ¼ tsp. pepper
- 2 hard-cooked eggs, chopped

Wash spinach thoroughly. Drain well and tear into bite-sized pieces. Combine spinach, onion, parsley and thyme in salad bowl.

Fry bacon over low heat, draining fat off as it collects. Drain cooked bacon and add to salad bowl. Return ¼ cup bacon fat to frying pan; add vinegar, dry mustard, sugar, salt, pepper. Heat together, then pour over salad and toss. Sprinkle chopped hard-cooked egg over salad. Serve at once. Yields 4 servings.

Garden Salad Bowl

- 10 radishes, sliced
- ½ c. sliced green onions
- 1 bunch watercress
- 1 c. chopped celery
- 1 c. shredded cabbage
- 1 cucumber, diced
- French dressing

Combine vegetables and toss together lightly with French dressing. Yields 6 servings.

Tomatoes Vinaigrette

- 2 medium tomatoes, sliced
- 1 medium cucumber, thinly sliced
- ½ onion, sliced and separated into rings
- 2 T. chopped parsley
- ½ c. salad oil
- ¼ c. wine vinegar
- ¼ tsp. savory
- ¼ tsp. tarragon
- ¼ tsp. crumbled bay leaf
- ⅛ tsp. black pepper
- ¼ tsp. celery salt
- ½ tsp. salt

Arrange tomato slices, cucumber slices and onion rings alternately in rows in a shallow glass serving dish. Beat dressing ingredients together and pour over vegetables. Chill in refrigerator, covered, for at least 12 hours. Drain and serve on shredded lettuce. Sprinkle with chopped parsley. Yields 6 servings.

Sesame Dressed Lettuce

- ½ c. sesame seeds
- 1 T. butter
- ¼ c. grated Parmesan cheese
- 1 c. commercial sour cream
- ½ c. mayonnaise
- 1 T. tarragon vinegar
- 1 T. sugar
- 1 tsp. salt
- 1 clove garlic, minced
- ¼ c. chopped green pepper
- ¼ c. diced cucumber
- 2 T. minced onion
- 2 medium heads lettuce
- Salt, pepper to taste

Saute sesame seeds in butter until lightly browned. Remove from heat and add Parmesan cheese. Blend sour cream, mayonnaise and vinegar until smooth. Add sugar, 1 teaspoon salt, garlic, green pepper, cucumber and onion; mix well. Tear lettuce into bite-



Garnish your green salads with radish roses, mushroom slices, green onion jade trees, green pepper and onion rings, cucumber slices, croutons, cheeses

sized pieces in salad bowl; sprinkle with salt and pepper and three-quarters of the sesame seed mixture. Toss with sour cream dressing and garnish with remaining seeds. Yields 8 to 10 servings.

Combine cabbage and onion in a bowl. In a smaller bowl, blend together the sugar, salt, vinegar, sour cream and caraway seeds. Mix dressing with salad and serve on an attractive salad plate or bowl lined with darker green cabbage leaves. Yields 5 to 6 servings.

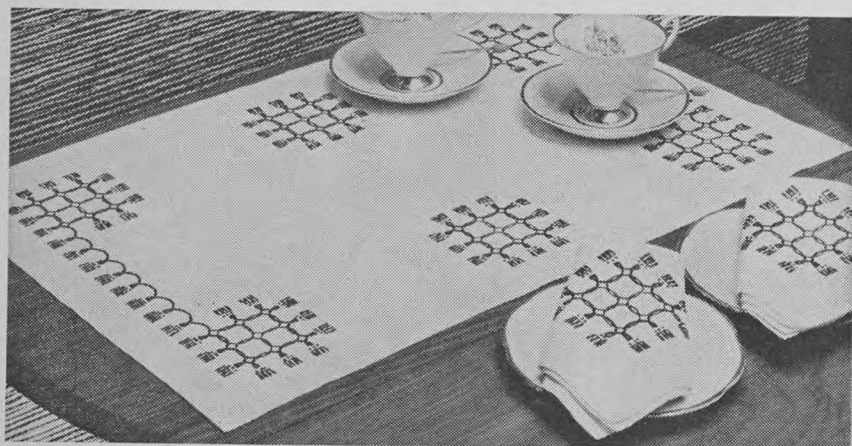
Caraway Slaw

- 3 c. finely chopped cabbage
- ¼ c. chopped green onions and tops
- 1 T. sugar
- ¾ tsp. salt
- 2 T. white wine vinegar
- ½ c. commercial sour cream
- ½ tsp. caraway seeds

★ ★ ★

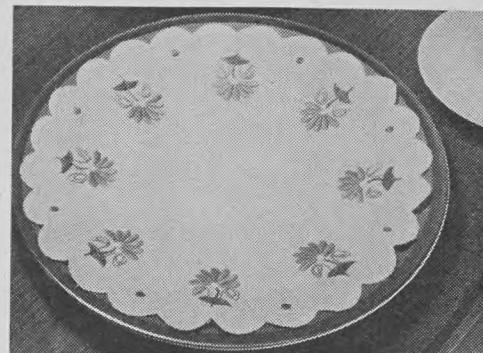
Key to Abbreviations

tsp.—teaspoon	oz.—ounce
T.—tablespoon	lb.—pound
c.—cup	pt.—pint
pkg.—package	qt.—quart



Stem, chain, up and down buttonhole, and French knot stitches are used to work the design on a trolley cloth and napkin set. Leaflet No. E-8593, 10¢.

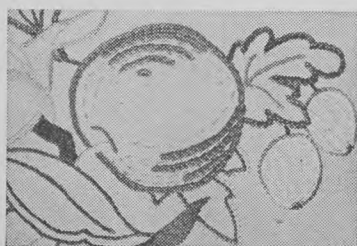
Leaflet No. E-8325, 10¢, offers a full-size tracing diagram for the floral motif and scalloped edge worked on this tray cloth. Satin, back, stem and buttonhole stitches are used on fine cotton 12" square.



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For handicraft patterns pictured above please address your order to Country Guide Needlework Dept., 1760 Ellice Ave., Winnipeg 21, Man.

Cyril Takes a Trip

by MARGARET MORRISON

CYRIL, THE ENGLISH SPARROW, sat on the porch of his little birdhouse with his feathers ruffled out, and sulked. He paid no attention to the feeding tray loaded with crumbs, raisins and suet. He wouldn't even answer Mrs. Sparrow's chatter and that was most unusual for him.

"Now, Cyril," Mrs. Sparrow scolded, "I've had quite enough of this. Whatever is in your crop anyway to make you act this way?"

Cyril shifted uneasily on his perch but Mrs. Sparrow pinned him with a look. Oh well, better tell her and get it over with, he thought.

"Why don't we ever have a winter vacation?" Cyril wanted to know. "Why do we have to stay here all winter and freeze when almost all the birds head for California or Mexico or some other warm sunny place?" he glared at Mrs. Sparrow.

"But we're homebodies," Mrs. Sparrow's voice was rising. "Our breed doesn't go traipsing about every spring and fall. We're just not the transient type."

"Well I'd like to be. Just once. So I'd know what they were all talking about," Cyril was a little shocked to have spoken his thoughts out loud.

"Go on then. Go with that shiftily lot," Mrs. Sparrow's voice was shrill. "But not me. I was born here and so

were my children. This is my home and here I stay."

Mrs. Sparrow's screech decided Cyril. "O.K., O.K., stick-in-the-snow," he shouted back, "I'm going," and away he flounced. He flew to the tall spruce tree on the edge of town where his friend Mr. Midnight, the crow, lived. In fact it was Mr. Midnight who had put the idea of going south into Cyril's head in the first place.

"How are we going to know where to go and when?" the untraveled Cyril asked.

"Easy," Mr. Midnight was terribly smart. "I've got a clock and a map right in my head. So have you, only you don't know it because you haven't used yours. Besides, Old Ruddy Duck is coming with us and he knows the country like the back of his webbed feet."

Cyril was too excited to sleep. He chirped all night waiting for dawn. At exactly 3:00 a.m. (before the heavy traffic) the three of them left, following a flyway going south that Old Ruddy said was the best and the shortest.

After a while Cyril started to feel hungry. Old Ruddy enjoyed eating grain in the fields as a change from pond seeds and Mr. Midnight ate anything. Anytime. He was something of a pest, always stopping to

eat and wanting to travel by night. Cyril still had a bump on his head from running into that microwave tower in the dark. And he wasn't as good as Old Ruddy and Mr. Midnight at living off the land. He was used to city food handed out to him. Well, I have relatives all the way to Mexico, he thought. Maybe we'll stop in some town or city and I can have a good feed of human's food.

The three flew over the international boundary, or at least so Old Ruddy said. But Cyril thought that was silly. He couldn't see a thing. Then Mr. Midnight decided he'd gone far enough and said he wanted to stay in Montana by the Old Missouri River for the winter. Cyril didn't mind too much. Privately he thought Mr. Midnight wasn't quite a gentleman.

Old Ruddy and Cyril kept on. A strong gusting wind blew them off course and they spent a miserable night huddled on a mountain chimney in Idaho. "The flyroads of this state are terrible," Old Ruddy complained.

AS THEY TRAVELED, they shared the sky with storms and smoke, tall buildings and airplanes, but their worst troubles were on the ground. Guns blazed at them and dogs and hungry animals chased them. They were singed in forest fires, starved when snows in the mountain passes covered all food, and went thirsty when they couldn't find water. Nevertheless, Old Ruddy,

seasoned traveler that he was, managed to duck all these problems, and, with the aid of his built-in compass, managed to keep them on the right flyway. But he was tiring.

"I feel just about shot," he confided to Cyril.

"Chin up, old boy, I think we're out of the woods," said Cyril, flapping at the desert ahead.

The desert was warm and pleasant and roomy. Accommodation was plentiful but food and water were not. It seemed to Cyril that living wasn't so easy in the summery south. As for the food Old Ruddy ate! Well! Cyril was so hungry he dreamed of raisin bread and suet pudding.

"I'm going back," he announced. "There's more sympathy and bread crumbs back home."

"Suit yourself," said Old Ruddy, "but I'm too old for the cold. I'll just meander down yonder to a nice sanctuary in Texas."

Cyril started back alone, hoping that the map in his head would work. He dipped a wing at Mr. Midnight in Montana. Mr. Midnight was watching an oil pump and bowing his head every time it went down, up, down, up, down.

Stout-hearted Cyril kept going north, back over the desert, the mountains, the international boundary. Then he saw his own little house with the blue roof. And the loaded feeding tray, and Mrs. Sparrow sitting in the sun smoothing her gray dress. Cyril thought she looked beautiful.

"Well?" said Mrs. Sparrow.

"I'm a bird brain," chirped Cyril, contrite. "There's no place like home."

Mrs. Sparrow moved over a little so that Cyril could get at the raisin bread and suet pudding. "Welcome home, luv," she said, and her voice was soft as the feathers of her petticoat. ✓

Young People



Nancy Sloat exhibits some of her dolls. She also made the smocked cushion on the back of the chesterfield and the dress she is wearing

She Designs Dolls

4-H'ER NANCY SLOAT, of Mouth of Keswick, York County, N.B., not only completes her clothing club projects and extra sewing with ease. She does something more. She designs and makes dolls that are noted for their workmanship and the life-like expression of their faces. What's more, she has already sold a number

of them, some to people in the Maritimes, others to tourists from the United States who have been visiting her district.

Nancy always enjoyed sewing. Then, 4 years ago, she joined the local 4-H clothing club. She was so enthusiastic about what she learned that, on her first achievement day,

she could display a large number of articles over and above club requirements. One was a shoe bag fashioned like a doll.

Since then she's made over 30 dolls that have found homes over a wide area. And she's turned out other sewing as well—shirts for her father, skirts, culottes, dresses and blouses for herself and her mother. When she and her sisters—Marilyn and Linda—were all busy with clothing club projects, things got hectic at the Sloat home.

Her other interests? Water skiing on the Saint John River in summer and skiing at nearby Crabbe Mountain during the winter. She's also actively involved with the junior auxiliary of her church.

The Sloats have a large dairy farm on the Saint John River about 12 miles from Fredericton. It's always a busy place but it was even busier last year when Jean Fraser, a 4-H'er from British Columbia, came to visit the Sloats under the interprovincial 4-H club exchange program.

Nancy was enthusiastic about 4-H for what it taught her about sewing and handicrafts. She's even more enthusiastic now that she's shared in the exchange program. Which, of course, is the basic purpose of "learning to do by doing." ✓

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No. 101



No. 102



No. 103

Lesson 1. No. 101. Learn basic sewing techniques and skills while you sew this bateau-necked overblouse. You'll learn how to make darts, stitch and trim and grade seams, and hem. Sub-teen sizes 8S, 10S, 12S, 14S; Teen 10, 12, 14, 16; Misses' 10, 12, 14, 16 and 18. The pattern price is 50¢.

Lesson 2. No. 102. Make a front-buttoned, sleeveless blouse and learn to apply interfacing, sew self and applied facings, and make button-holes, in addition to Lesson 1 skills. Sub-teen sizes 8S, 10S, 12S, 14S; Teen 10, 12, 14, 16; Misses' sizes 10, 12, 14, 16 and 18. Pattern price is 50¢.

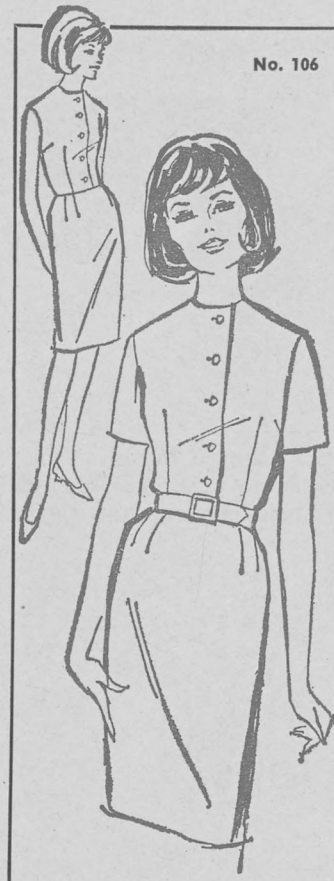
Lesson 3. No. 103. In making this unpressed pleated skirt with back closing you learn to make soft pleats, make a skirt opening without zipper, attach a waistband, and hem a skirt. Subteen sizes 8S, 10S, 12S and 14S; Teen sizes 10, 12, 14, 16; Misses' sizes 10, 12, 14, 16, 18. Pattern price is 50¢.



No. 104



No. 105



No. 106

Lesson 4. No. 104. A dart-fitted, straight skirt with inverted pleat teaches more sewing skills. Learn to apply a pleat underlay; insert a slot seam zipper; hem a skirt with pleat. Sub-teen sizes 8S, 10S, 12S, and 14S; Teen sizes 10, 12, 14, 16; Misses' sizes 10, 12, 14, 16, 18. Price is 50¢.

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Rocks in My Garden

Story and photos
by DONOVAN CLEMSON

SOME GARDENERS spend a lot of time picking off rocks and hauling them away before they lay out permanent beds and lawns. I reversed this process. I needed rocks, and the sandy loam on which I was located was innocent of any specimens larger than a thimble. I wanted many fairly large ones because I had decided that rocks were the answer to the problem of maintaining a nice garden with limited expenditure of time and effort.

Some readers might construe this to mean I wished to avoid work. They'd be quite right, but I hasten to explain that I wanted to avoid work in the garden only because it interfered with other plans I had for the use of my leisure time.

Originally I tried to achieve this goal by seeding most of the garden space to lawn which would only need mowing a few times to keep the place looking neat all summer.

At first I thought of a large concrete slab instead of a lawn. However, I didn't want the place to look like a service station. Then I thought of reducing the lawn area by laying down some crazy paving, particularly adjacent to the house where hand trimming the grass was tedious. By doing this I reduced the lawn more than one third, and I have never regretted the job. The paving is permanent and clean, and I can run the mower over the border of the lawn and eliminate hand trimming. I did leave a few gaps in the paving for geraniums that provided spots of color all summer.

It wasn't easy to find suitable rocks. However, we eventually found them in a creek bed within a radius of 50 miles from home. The action of the water had given them attractive rounded edges and they were perfect for laying in concrete. However, I soon discovered that when laying concrete on porous soil a barrier must be introduced between the two or the mix will be sucked dry by the soil and become

unworkable. For this purpose I used paper feed sacks.

I was soon convinced I was on the right track. This paving job was so successful that I cast about for other schemes to reduce the lawn even more. I collect rocks—not necessarily the kind rock-hounds collect, although I collect those too, but any rocks. If I find an unusual or interesting rock I want to take it home. Of course, I can't always do this—many of them are too big to move—but anything up to 500 pounds that takes my fancy generally ends up in my collection.

I begged one of the first big ones from a farmer. A beautiful, rectangular granite block, it lay on his fence line and my wife and I thought it would make a perfect door-step. We borrowed a couple of fence posts and worked the rock up an inch at a time into the back of our light delivery. Our two daughters were with us and it was all the four of us could do to handle it. As we drove triumphantly off, I caught a glimpse of the farmer entering his house. His wife was standing at the door, and I saw him tap his forehead significantly and jerk a thumb in our direction.

Next, I reasoned that by displaying some of my favorite rocks on the lawn I could eliminate more grass. I especially like a boulder donated by the farmer who combined my crop for several seasons. This granite boulder looks somewhat like an egg, yet it is so symmetrical in shape that I am not at all sure that it is a natural production. It weighs about 100 pounds. The "egg" was installed on the lawn on a big flat slab (donated by another farmer) that had been let into the turf so it would cause no obstruction to mowing. The "egg" was a great success. Visitors found it more interesting than flowers, and their children could rock it and roll it around without doing any harm.

I was so pleased with the egg I was eager to roll out some more

specimens and reduce the grass even more. But here I encountered opposition from my wife.

"One's an ornament," she declared, "two's a cemetery."

However, still determined to cover up as much grass as possible, I proposed a rock table at which we could take tea on summer afternoons. Once this proposal was accepted, we scoured the country seeking a suit-

able slab. Finally we located a lovely piece about 25 miles from home. It took us a long time to move it to the road where we could load it. Personally, I'm glad we made the effort. However, from my daughters' remarks at the time, I suspect that they didn't consider rock hauling a suitable occupation for young ladies. The table legs came from a rock outcrop 50 miles in another direction where a slide provided plenty of broken basaltic columns. By setting the legs in a concrete slab, another 10 square feet of lawn disappeared.

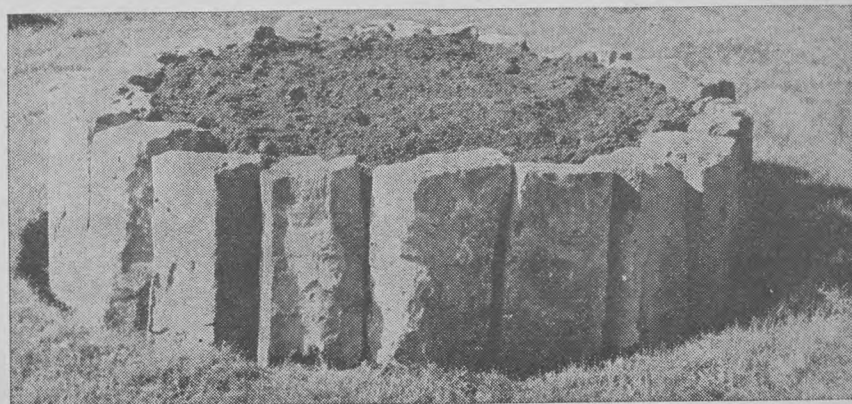
The basaltic columns gave us an idea for raised flower beds. We built two circular beds, 6 and 7 feet in diameter, each requiring a couple of tons of rock. The stones were set vertically in concrete. This concrete extended 6 inches beyond them and kept the grass from encroaching. And, by elevating our flower beds about 16 inches above the lawn, they're protected, to some extent, from dogs and kids. Actually, these flower beds were the most satisfying of the many things we did with rocks.

Once we'd completed the second flower bed, we had a pleasant balance between lawn and flower space—not too much of either. Still, with every round of the mower I pondered the possibility of eliminating more grass. However, before I could introduce more rock, we sold the farm and all our work to eliminate work accrued to the new owner. But we did take the "egg" for a souvenir. It sits on our new lawn, the nucleus of a fresh collection of rock in a garden that's not going to be dominated by flowers.

RIGHT:
Paving around the house kept the lawn at a distance. The stones, warmed by the sun, became a favorite spot for the cat on spring mornings



BELOW:
Flower beds made with basalt columns. This bed needs concrete around it to keep grass from encroaching



Continued from page 16

GROW GRAIN, FEED HOGS

the lack of people with experience in handling hogs. It's one of his biggest problems. The wrong hired man can cause losses of hundreds of dollars. He has paid for such losses. Another problem is the shortage of desperately needed farm supply firms, veterinarians, and trained workers. "We spend too much of our time trying to solve problems that have already been answered in other areas," he explains.

Even so, he says the industry is ready to roll. Grain can be grown cheaply enough to give local farmers a tremendous advantage in keeping down costs of production. Now that the Hog Marketing Commission in Manitoba has put the selling system for hogs onto a sound basis, there is reason to be optimistic.

Anderson keeps emphasizing that the key to a profitable hog program is feed—and much of his feed comes from his land. He has 530 acres—land that has been mined over the years. It isn't as good as it was a generation ago. But he is learning how to work with it and bring crop yields back up to where they were years ago.

He quit summerfallowing when he took over the farm and he is cutting back on the amount of cul-

tivation. He no longer pre-tills before seeding. In the fall he discs right behind the combine, then deep-tills with a heavy-duty cultivator. He seeds with a discer-seeder, following with the harrow. That is his entire cultivation program. He says every tillage operation he has eliminated has resulted in better crops.

\$2,500 WORTH OF FERTILIZER

He is increasing his use of fertilizer every year. This year, he bought \$2,500 worth. He broadcasts nitrogen early in the spring and may switch to fall application. Then he drills in 40 lb. per acre of 11-48-0 with the seed. Since he is aiming for high yields, he is putting on more fertilizer, in some instances, than soil tests indicate is needed.

Hog manure is helping to boost soil fertility too. He spreads it regularly.

So far, he has got along with a minimum of equipment for grain-growing although he now needs a new combine. He figures that his per acre costs of production will rise slightly when he buys it. He stores 12,000 bu. of grain on the farm, and sells about 3,000 bu. of wheat to the Wheat Board. He buys back feed grain later in the year as needed.

Anderson pays the same careful attention to his hog management

program as he does to growing grain. Since he is handy with machinery and equipment, he has been able to expand his buildings, install his feed storage bins, grinding and mixing equipment, and augers, and still keep his total building investment for his 75 sows and for market hogs, under \$15,000.

He started with a few well-bred Yorkshire sows in 1949 and his entire sow herd traces back to these three. In 1960 he was producing only 300 hogs a year. He sold his hens at that time, converted the old hen house and expanded it to make a hog house measuring 96' by 70'. This includes the 12' by 30' central feed plant with the hammer mill, the overhead wooden feed bins and the homemade proportioner legs leading down to it. Feed is augered to self-feeders in the pens.

A thermostatically controlled oil furnace provides supplementary heat to the hogs in the winter. Before he installed this Anderson says he was continually battling diseases like enteritis. "Pigs can stand some cold, but they can't stand dampness," he explains. His furnace keeps the place dry.

HAULS HOME BULK FEED

Anderson hauls his own hogs to market in Winnipeg, and uses these trips to haul home bulk concentrates (one formula for the sows, another for the pigs) for his feeding program. He also buys bagged pig starter.

He weans pigs at 5 weeks onto a prepared starter, and then switches to his own mix at 8 or 9 weeks old.

The first grower ration consists of two-thirds wheat and one-third barley (plus concentrate) but this is adjusted twice until it includes one-third oats. The finishing ration includes still more oats. This way he restrains growth to get higher grades.

Dry sows are kept outdoors in a corral in winter with simple shelters provided. "They often lose a little ear or tail from frost," Anderson admits. "But they stay healthy." In summer, they are on pasture.

His program is paying off too. He marketed 8.7 hogs per sow farrowing last year and hopes to hit 9 this year.

He uses a rotational breeding program involving Yorkshire, Lacombe and Landrace boars brought along in sequence. After each group of sows have had four litters, he replaces them, by bringing along a group of cross-bred gilts from his best litters and then switching to a boar of the next breed. He buys boars from the best ROP breeders he can find.

His sow-farrowing barn is a make-shift affair, but so far it has done a good job for him. It measures only 20' by 50', but he moves sows to pens in the main hog building a week or so after farrowing. He plans to put crates into the farrowing house so he can handle 10 sows at a time in it. An oil heater provides supplementary heat. V

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Continued from page 20

HOW TO ADJUST YOUR COMBINE IN THE FIELD

This is generally lowered when you encounter heavy straw and raised in light straw conditions.

CYLINDER STRIPPER ADJUSTMENTS

In many combines the beater behind the cylinder strips the cylinder, but in some machines an adjustable spring-loaded stripper bar is used. In this case, adjustment is necessary to prevent material from following around and wrapping the cylinder instead of passing on to the front of the straw walkers.

STRAW WALKER SPEED

Straw walker speed generally coincides with ground speed because the straw must be moved away from behind the cylinder as fast as it is being fed in. Speeding up the walkers will move your straw faster and agitate it more, and you will get better separation. However, if walker speed is too fast, separation will be poor because there will not be enough shaking action.

Up to 25 per cent of your grain separation is by this grain dropping through into the return troughs under the walkers. If your adjustments are correct, but you find you are still losing grain over the walkers, your only alternative is to slow down your forward speed so as to reduce the input of material into the machine.

THE MAIN CHAFFER AND EXTENSION CHAFFER

The adjustable chaffer should be opened wide enough so threshed grain and spikelets containing a few

kernels will drop through. But it should not be opened wide enough so that large parts of heads fall through. Air from the fan passing upwards through the chaffer openings floats off the chaff and short straws while the grain drops through against the air stream.

The extension chaffer should be opened wide enough so parts of heads passing over the main chaffer will drop through into the return to be re-threshed.

THE CLEAN GRAIN SIEVE

Grain falling through the chaffer drops onto the clean grain sieve. This should be opened wide enough so that only threshed kernels pass through. Grain passing through this sieve is elevated to the grain tank, and material passing over the end joins the tailings from the chaffer to be re-threshed at the cylinder. For some special crops, the adjustable clean grain sieve may be replaced with a round or slotted-hole type of sieve.

REGULATING THE FAN AND AIR BLAST

The amount of air supplied by the fan may be regulated by changing the speed of the fan, and/or by opening or closing the air inlets to the fan. Enough air should pass upwards through the chaffer so as to float the chaff and light, short straws over the end of the chaffer without carrying over any grain. If grain is being blown over your chaffer, slow the fan speed (or close

off the air inlets) until no grain is being lost, then gradually increase the amount of air. Use as much air as possible without losing grain. More grain is usually lost with too little air than with too much air.

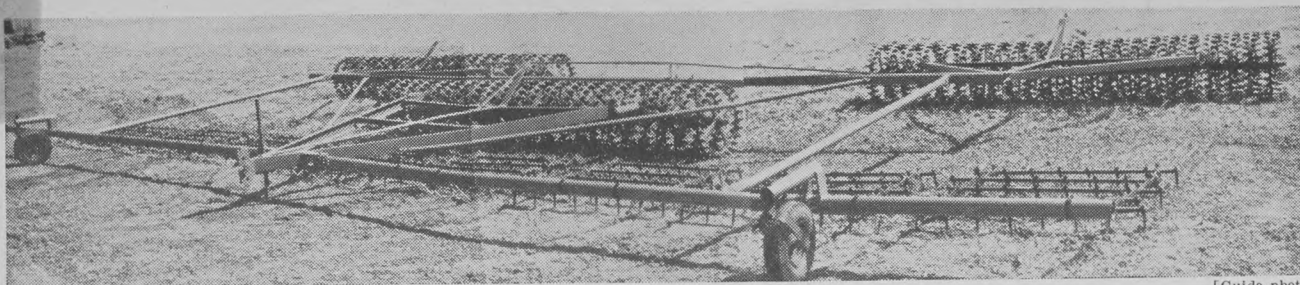
ADJUSTING WINDBOARDS OR DEFLECTORS

Windboards or deflectors in the air stream regulate the direction of air flow to the chaffer, and in some cases to the cleaning sieve. For heavy grains, the air stream should be directed to the front of the chaffer. If grain is being lifted with the chaff it should drop to the chaffer and pass through before it reaches the extension chaffer. For lighter grains and grasses, direct the air more evenly throughout the length of the chaffer as light seeds are easily floated over and lost.

READ THE MANUAL

Checking for losses over the shoe walkers should be done when the combine is in normal operation in the field. However, care must be taken so that no one is injured by the straw spreader. Sampling grain in the tank can tell you much about the adjustment of your machine. But it will not tell you if grain is being lost over the shoe or walkers.

General adjustments for the threshing and separating parts of your combine are contained in the operator's manual. Make this manual your guide for setting your machine for different crops. Although detailed and accurate settings are given for each part of the machine for average crop conditions, some variation may be necessary for special or adverse conditions. V



This harrow-packer combination uses the hitch designed by Fred Schneider, Eston, Sask. [Guide photo]

Build a 40-foot Harrow-Packer

A harrow-packer combination does the best job for this farmer

IN 1947, Fred Schneider of Eston, Sask., built a hitch for a harrow-packer combination which proved so successful that other farmers wanted to buy it. He and his sons built several, but they soon had more orders than their farm machine shop could handle so he suggested that Country Guide pass on a few of his ideas for farmers who want to make their own.

"Although we build a number of these units every year we cannot supply the demand," said Fred. "But there are still a lot of old crowfoot packer wheels lying around. I'm sure if the plans were available many farmers could assemble their own units."

When a tractor pulls this combination it pulls the packers but *pushes* the harrows. The hitch consists of one front A-frame of 4" channel iron braced with 2"x2"x 5/16" angle iron and two A-frames made of 5/16"x2"x2" angle iron. The frames are linked together by a 27'6" spreader bar of 3 1/2" OD pipe, and contain the three crowfoot packer units. These consist of eleven 24-inch cast iron crowfoot wheels on a 6' 8 1/2" axle of 1 3/4-inch round iron and assembled two to each frame.

The frames are arranged in a triangle with the larger one (14-ft.) at the apex (front) and the two smaller ones at the base (rear). Power to draw the packers is transmitted through the forward A-frame to the spreader bar. The harrows, which are attached by chains to an 18'5" drawbar on each side of the front frame, are pushed from the spreader bar by two 10'9" bars made of 2" pipe. The short harrow chains (10-link) are fastened to the drawbars by adjustable clamps, so they can be spaced to fit

any type of harrow and the links are large (3" long) to allow easy fastening to the harrows.

"We've been making these harrow-packer combinations in three sizes—30-foot, 35-foot and 40-foot," Fred explained. "But the 40-footer is becoming the most popular, especially in our area. These three sizes make the hitch able to accommodate either the flexible or diamond harrows. This arrangement allows a very close hook-up because the harrow remains the same distance from the packers at all times, including turning. For road transport, the harrows load onto the front A-frame, and the packers can be unhooked and hitched one behind the other by simply pulling out a few pins. The whole hitch can be dismantled with a pair of pliers and with very little effort."

For all three sizes of this combination the front sections are the same, that is, 14 feet in width and containing 22 wheels. In the 40-foot size the two rear sections are also 14 feet wide. Here are some details of packer axles and bearings in Fred Schneider's own words:

"Instead of one axle to one A-frame we place two on one," he explained. "For this, we need one heavy bearing nearer the center of the axle and one stabilizer bearing near the inner end to keep the axle in line with the frame. This makes it possible to narrow the A-frames so as to make a more compact unit. It also places the weight of the frame on the entire axle instead of on one end."

The axles are made of 1 3/4-inch round iron. A hole is bored 3 1/4 inches from one end to bolt the first wheel through the hub so that the wheels will not turn on the axle. There are two holes in the other end to hold the rest of the wheels and the bearings on the axle and make it easier to adjust end play. The main bearings on the large front frame are high speed babbit, 7 inches long and with dust caps on each side. The stabilizer bearings are 4 inches long and also of babbit. On the rear frames, the main bearings are bisel disc harrow wood bearings. The axles fasten with the main bearing to the outside of each A-frame, while stabilizer bearings fasten near the center of the frame with a loose bar to allow flexing.

The Schneiders have found this harrow-packer combination much more effective than pulling packers behind a discer. It firms the soil for

better seed germination but does not pulverize it so that it blows easily.

"When I pulled my packer behind a discer it packed a lot of weeds down and left them to continue growing," Fred explained. "Then in wet conditions they rolled up and made a heavy load. They also created a nuisance in filling the seeder or discer."

"By placing the harrows directly in front of the packers, the harrows will first level the soil, pull out a

lot of weeds and leave fresh lumps," he continued. "The packers will not crush them as much or pulverize the soil."

Fred does not believe in disturbing his land any more than is necessary. His first run over a field is with the discer-seeder. Then he watches the field for a few days to see if he is going to have a weed problem. If a heavy growth of weeds appears, he goes over the land with a rod weeder in the same direction as with the discer. Then he follows with his harrow-packer combination on the angle. He angles this equipment across the field so as to level wheel marks. Angling the field in one direction with this combination and then repeating the operation right away in the opposite direction has given the Schneiders excellent results on stubble seeded crops. Germination has been more even and about 2 weeks earlier and yields have been above average. —C.V.F.

Dairy Farmers Ask Policy Revisions

DIRECTORS of the Dairy Farmers of Canada strongly recommended several changes in the national dairy policy when they met with Federal Agriculture Minister Harry Hays recently.

In the first place, the Dairy Farmers noted that the Government had not announced final decisions on how it would implement the objective of a minimum price of \$3.50 per cwt. for manufacturing milk. They claimed this lack of information has caused uncertainty, and weakened the producers' position in price negotiation. They also wanted to learn whether the national average price will exclude special payments such as transportation discounts, bulk tank and quality premiums, co-op patronage dividends and provincial price subsidies. Producers naturally want these excluded from the calculations since the inclusion of these payments would raise the national average price and lower assistance from the Government.

The Dairy Farmers were also critical of the part of the policy providing that deficiency payments be reduced by the amount the Government spends to promote exports of surplus dairy products. They argued that export subsidies help to boost domestic prices and hence reduce the deficiency payments. If the pro-

ducers must pay for the export subsidies the Dairy Farmers say they are being penalized doubly while other sectors of the industry will benefit. They asked, therefore, that the deduction of export subsidies from deficiency payments should not be applied to all, or at least not until the Government has paid the first \$5 million.

A third point on which the Dairy Farmers want action is in the use of subsidies to help those sections of the dairy industry which are in the worst position . . . notably the cream producers, cheese milk producers and producers of milk for casein and butter. To help them, the Dairy Farmers asked an additional subsidy of 3 cents a pound butterfat; a subsidy of 15 cents a cwt. for cheese milk; and unspecified assistance for the production of casein.

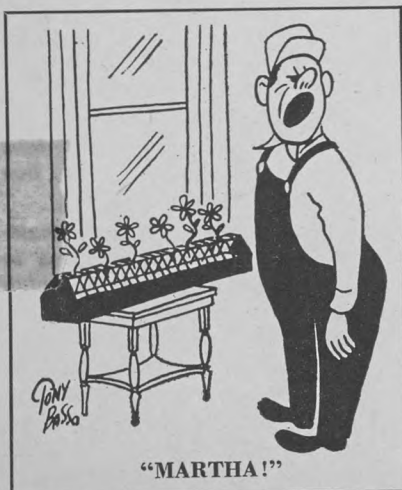
The Dairy Farmers objected that the new policy does not specify that the lump sum payment designed to bring the support level on processing milk up to \$3.50 will continue beyond the current dairy year. They said they are sure the Government

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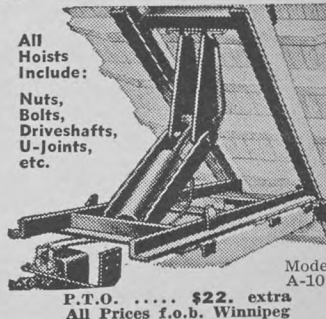
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did not intend this as a one-time payment, but asked that this be said quite clearly. They added that a level of \$3.30 a cwt. as provided under the deficiency payment section of the policy would not provide satisfactory support in future years and that a further increase in support levels may be needed and justifiable in the future.

Finally the Dairy Farmers asked

the Minister to include excess or surplus fluid milk in the policy, because in many small markets a large part of the fluid milk is processed. Producers in those areas would only benefit from the small price increases for butter and cheese. The Dairy Farmers asked that at least the consumer subsidy on butter be paid on surplus fluid milk.—*Jack McPherson.*

Letters

Wants Correspondent

Your paper is very interesting. Would it be possible for me to contact a lady on a farm or ranch who wanted to exchange magazines and papers? I am interested in the every day life of farming, houses, plants, etc., but not recipes. We do not see any of your women's magazines here but can buy papers from the U.S. and Britain.

MISS M. WARD,
P.B. Quorn, S.A.
Australia.

Half Century of Reading

Dear Country Guide, and I really mean the word dear in the true endearing sense. For almost half a century, The Farm Magazine has been a regular part of our family reading. We have taken it since the early days when it was known as the Grain Growers' Guide, and read

it on through its history and expansion as it became the Guide to all kinds of farmers. The change of name to Country Guide was a step forward for it better expressed the function of the paper.

No doubt, the fact that I was a part of the United Grain Growers from August 1919 where I started with the company as a grain buyer at Sinclair, Man., had a great deal to do with my acquaintance with the Guide. It was a guide not only to farmers but also to the grain buyer as he could discuss matters regarding farming practice with his customers, very often to their mutual advantage.

Knowledge is power, and the Guide increases the knowledge of those who read it objectively.

The Country Guide of the present day is a magazine to be proud of and this fact is recognized

through all of the different types of agriculture in our great land.

W. G. MUNN,
Saskatoon, Sask.

Foolish People

The article, "The Buck Stopped Here," by Cliff Faulkner in your April issue caused me again to realize how very foolish people are.

I am reminded of the "big scare" on buying cranberries one season because some of the crop was supposed to be contaminated by a certain spray. Folks just wouldn't buy them, as if a slight contamination could possibly affect anyone when one considers that the berries can be washed and one eats only a very small serving, perhaps two or three times during the holiday season.

In "Stop the Buck" they proved just as unthinking about other produce. Do they not stop to think that the farmer uses his own potatoes, eggs, milk, etc., and certainly should they be at all dangerous, he would be the first to feel the effects, his being a steady diet.

A.M.,
Portage la Prairie, Man.

Irrigation Overlooked

Your beautiful cover on the May issue warmed the cockles of every heart in the sprinkler irrigation industry. And then the "about our cover" . . . when danger of frost is past it's time to get tomato plants into the field. These plants are being staked on an Ontario farm.

Not a word about the sprinkler system in the background providing necessary soil moisture for a rapid

start to a healthy, profitable harvest for the growers of those tomato plants. What a pity!

But I still enjoy your magazine. Hopefully you'll have some good sprinkler articles in later this year.

R. C. MUELLER,
Executive Secretary,
Sprinkler Irrigation Association,
1318 Second St.,
Santa Monica, Calif.

Keeps Informed

I would like to tell you how much we enjoy reading the "Country Guide." There is something for everyone in the family. It keeps me informed about agriculture, which I so badly need.

I will never miss reading "Let's Think It Over" by the Very Rev. M. L. Goodman.

Pete Williams' column is very good and it is worthwhile reading.

We started farming 7 years ago. It was hard for we didn't get any financial support. But my wife, our 4 children and myself enjoy farm life.

We also are thankful to live in this good country of Canada.

PETER JANZEN,
Coaldale, Alta.

Called East

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M.A.M.,
Lancaster, Ont.

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Hi Folks:

Every once in a while I seem to get myself trapped in a spot where I have to tell one of my boys that he is spending too much time on some activity or another "that will never earn him a dime." Whereby he replies that "money isn't everything," and this makes me kind of uncomfortable for I feel that somehow our positions have become reversed. I should be telling HIM that money isn't everything because it isn't, or at least it shouldn't be. Integrity, for one thing, should rate above money.

But how can you impress your kids with the value of integrity when they pick up a paper and read where some politician, who has been dismissed for some wrongdoing, has been returned to office by the voters with an overwhelming majority? Where, in a pipeline scandal, the premier of a province has some bitter things to say about those who exposed the scandal, and stoutly defends those who took part in it? Where large-scale thievery is discovered in an organization which solicits public funds, and the or-

ganization goes and fires the discoverer?

From time to time the province in which we live has sponsored a stock or bond issue so that as many people as possible can have a stake in the development of their natural resources. As this investment amounts to pretty much of a sure thing, the government goes to a good deal of trouble to see that every citizen gets a chance at a fair share. But apparently a large percentage of our citizens are not content with their fair share, no matter how respectable and prosperous they appear to be. To get more than their share many will even go so far as to perjure themselves. I suppose if it was bread that was being doled out to a hungry people they would act the same way.

I asked a local businessman about this. He belongs to a service club which sports a motto about ethics and personal behavior that is so high-toned it's a wonder it doesn't take right off into the blue.

"It's only good business to take all you can get," said he. "We live in a business-oriented society."

The way I see it, if a business-oriented society has brought us to this sad state of mind then it's high time we tried something else. Competition is a fine thing up to a point, then it has to be replaced by some honest co-operation or everything we have built will go up in smoke.

Sincerely,
PETE WILLIAMS

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